



Port Stephens Council
Kings Hill Residential Lands Rezoning
Updated Traffic and Transport Study

16 April 2019

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Table of contents

1.	Introduction	1
1.1	Background.....	1
1.2	Objectives of this Study	2
1.3	Study Area	2
1.4	Study Limitations and Assumptions.....	3
1.5	Stakeholder Consultation.....	4
1.6	Report Structure.....	4
2.	Planning Context.....	5
2.1	National and State Planning Principles.....	5
2.2	Local and Regional Planning Principles	5
2.3	Planning Principles	11
2.4	Planning Indicators (Assessment Criteria)	11
3.	Existing Situation.....	13
3.1	Site Location	13
3.2	Land Uses.....	13
3.3	Existing Transport Context	14
3.4	Existing Road Network	19
3.5	Assessment Criteria.....	25
3.6	2017 Traffic Count Data.....	28
3.7	Midblock Capacity Assessments – Existing Situation	28
3.8	Intersection Capacity Assessments – Existing Situation	29
3.9	Crash Data.....	33
4.	Committed Developments.....	37
4.1	Planned Growth	37
4.2	Planned Infrastructure Upgrades.....	37
4.3	Committed Developments in surrounding area	37
4.4	Future Background Traffic Growth.....	38
5.	Proposed Kings Hill Development	39
5.2	Development Staging	40
5.3	Potential Traffic Generation	40
5.4	Trip distribution	43
5.5	Public Transport Network Integration	44
5.6	Active Transport Network Integration	45
6.	Traffic Impact Assessment.....	48
6.1	Method.....	48
6.2	Future Midblock Performance.....	49
6.3	Future Intersection Performance	51
6.4	Summary of Intersection Upgrade Trigger Points	56

6.5	Sustainable Transport Appraisal.....	57
6.6	Emergency Planning - Flood Route Assessment.....	59
7.	Strategic Cost Estimates.....	61
7.1	Strategic Cost Estimates	62
8.	Summary and Recommendations.....	65
8.1	Overview	65
8.2	Key Findings	65
8.3	Key Recommendations.....	67
8.4	Planning Principles	74

Table index

Table 3-1	Raymond Terrace Bus Frequency.....	19
Table 3-2	Average Daily Traffic.....	25
Table 3-3	Typical Mid-block Capacities for Urban Streets.....	25
Table 3-4	Level of Service Descriptions for Urban Streets.....	26
Table 3-5	Midblock Level of Service Criteria – Rural Roads	26
Table 3-6	Midblock Level of Service Criteria – Freeways (One Direction).....	27
Table 3-7	Measures of Effectiveness for Level of Service Definition for Intersections.....	27
Table 3-8	Intersection LoS Assessment Criteria.....	28
Table 3-9	2017 Existing Conditions Midblock Assessment	29
Table 3-10	Existing 2017 SIDRA results summary.....	33
Table 4-1	Observed Traffic Growth.....	38
Table 5-1	Development staging	40
Table 5-2	Traffic Generation	41
Table 6-1	LOS existing road network with background traffic growth.....	49
Table 6-2	Kings Hill Development without the interchange	50
Table 6-3	Kings Hill Development with the interchange	51
Table 6-4	SIDRA Results - Proposed William Bailey Street/Newline Road Intersection Layout	56
Table 6-5	Scenario A – Background Traffic Growth Trigger Points (no Kings Hill Development).....	56
Table 6-6	Scenario C – Kings Hill Development Trigger Points	56
Table 6-7	Sustainable Transport Checklist for Kings Hill.....	58
Table 7-1	Strategic Cost Estimates and Apportionment of Costs for Proposed Common Infrastructure.....	63

Figure index

Figure 1-1	Kings Hill Study Area	3
Figure 2-1	Hunter Regional Plan 2036.....	6
Figure 2-2	Port Stephens Planning Strategy Map.....	7
Figure 2-3	Kings Hill Residential Precincts	8
Figure 2-4	Kings Hill Zoning Map.....	10
Figure 3-1	Land Zoning Plan.....	14
Figure 3-2	JTW Destinations for Raymond Terrace Residents	15
Figure 3-3	JTW Travel Mode for Raymond Terrace Residents	15
Figure 3-4	Existing Pedestrian Network.....	16
Figure 3-5	Existing Bicycle Network.....	17
Figure 3-6	Existing Bus routes within Raymond Terrace/Kings Hill.....	18
Figure 3-7	Kings Hill Existing Road Network	21
Figure 3-8	– Pacific Highway facing south at Six Mile Road.....	22
Figure 3-9	– Newline Road facing north towards Six Mile Road.....	22
Figure 3-10	- William Bailey Street facing east	23
Figure 3-11	- Adelaide Street facing north towards William Bailey Street	24
Figure 3-12	– Six Mile Road facing east near Newline Road	24
Figure 3-13	William Bailey Street/Newline Road Intersection.....	30
Figure 3-14	Adelaide Street/William Bailey Street Intersection Configuration.....	30
Figure 3-15	Beaton Avenue/Newline Road Intersection Configuration.....	31
Figure 3-16	Six Mile Road / Newline Road Intersection Configuration.....	31
Figure 3-17	Six Mile Road / Pacific Highway Intersection Configuration.....	32
Figure 3-18	Port Stephens Waste Processing Centre / Newline Road Intersection Configuration.....	32
Figure 3-19	Crashes by type	33
Figure 3-20	Location of Crashes (2011-2016)	35
Figure 3-21	Number of Crashes along Each Road (2011-2016)	36
Figure 5-1	Kings Hill – Proposed Infrastructure Plan.....	39
Figure 5-2	Kings Hill - Future Road Network (prior to 2022).....	42
Figure 5-3	Kings Hill - Future Road Network (beyond 2022)	43
Figure 5-4	Kings Hill Development Traffic Distribution	44
Figure 5-5	Indicative Bus Route for Kings Hill.....	45
Figure 5-6	2 km Pedestrian and 5 km Cycling Catchment Plan	46
Figure 5-7	Indicative Shared Path Connections.....	47

Figure 6-1	Scenario A LOS Summary.....	52
Figure 6-2	Scenario B – LOS Summary.....	53
Figure 6-3	Scenario C - LOS Summary	54
Figure 6-4	Proposed William Bailey Street/Newline Road Intersection Layout	55
Figure 6-5	Kings Hill Proposed Flood Free Access Route.....	60
Figure 7-1	Kings Hill Road Infrastructure Category Plan	61
Figure 7-2	Typical Cross Road Sections.....	63
Figure 8-1	Greater Newcastle's strategic centres, urban renewal corridors and growth areas	73

Appendices

Appendix A – National and State Planning Guidelines

Appendix B – SIDRA Results

1. Introduction

1.1 Background

In 2012, GHD were commissioned by Port Stephens Council (Council) to undertake a Traffic and Transport Study (TTS) for land located north of Raymond Terrace that had been zoned for residential purposes. The area known as Kings Hill was projected to accommodate (approximately) an additional 4,300 dwellings. See Section 1.3 for Study Area.

As part of the TTS assessment, intersection traffic modelling analysis was undertaken for the following scenarios:

- **Scenario A** - The existing road network with background traffic growth at five-year intervals between 2016 and 2036;
- **Scenario B** - The existing road network with traffic associated with the Kings Hill development and background traffic growth at five-year intervals between 2016 and 2036;
- **Scenario C** - Future road network with a proposed northbound left slip lane from the Pacific Highway (Stage 1) into the Kings Hill site, with Kings Hill development traffic and background traffic growth at five-year intervals between 2016 and 2036; and
- **Scenario D** – Future road network, with a new full interchange at the Pacific Highway (Stage 2), with Kings Hill the development traffic and background traffic growth at five-year intervals between 2016 and 2036.
- The assumed traffic growth rates adopted to the study are as follows:
 - Pacific Highway – 2.9 percent per annum;
 - Newline Road – one percent growth per annum; and
 - All other roads in the study area – two percent growth per annum.

Key findings of the TTS included:

- There are limited active transport and public transport facilities in proximity to the subject site;
- The assessed intersections in the vicinity to the subject site currently operate satisfactorily;
- For Scenario A, improvements to the road network would be required to accommodate the future background traffic growth (without the Kings Hill proposal);
- The trigger point for infrastructure upgrades (including a new Pacific Highway Interchange) is 400 residential lots;
- Even with the proposed full interchange at the Pacific Highway (Scenario D), the trigger point for additional intersection improvements in the study area is 1,400 lots. This includes an upgrade to the William Bailey Street/Newline Road/Port Stephens Street to provide traffic signals.

Council subsequently approved the proposed Kings Hill development, subject to individual development applications for the proposed residential developments.

1.2 Objectives of this Study

Following Council acceptance of the previous *Kings Hill Traffic and Transport Study* (GHD, 2013), there have been a number of changes to the proposed development at the Kings Hill site. PSC have commissioned GHD to update the previous TTS. This study provides an update to the previous *Kings Hill Traffic and Transport Study* and is required for the following reasons:

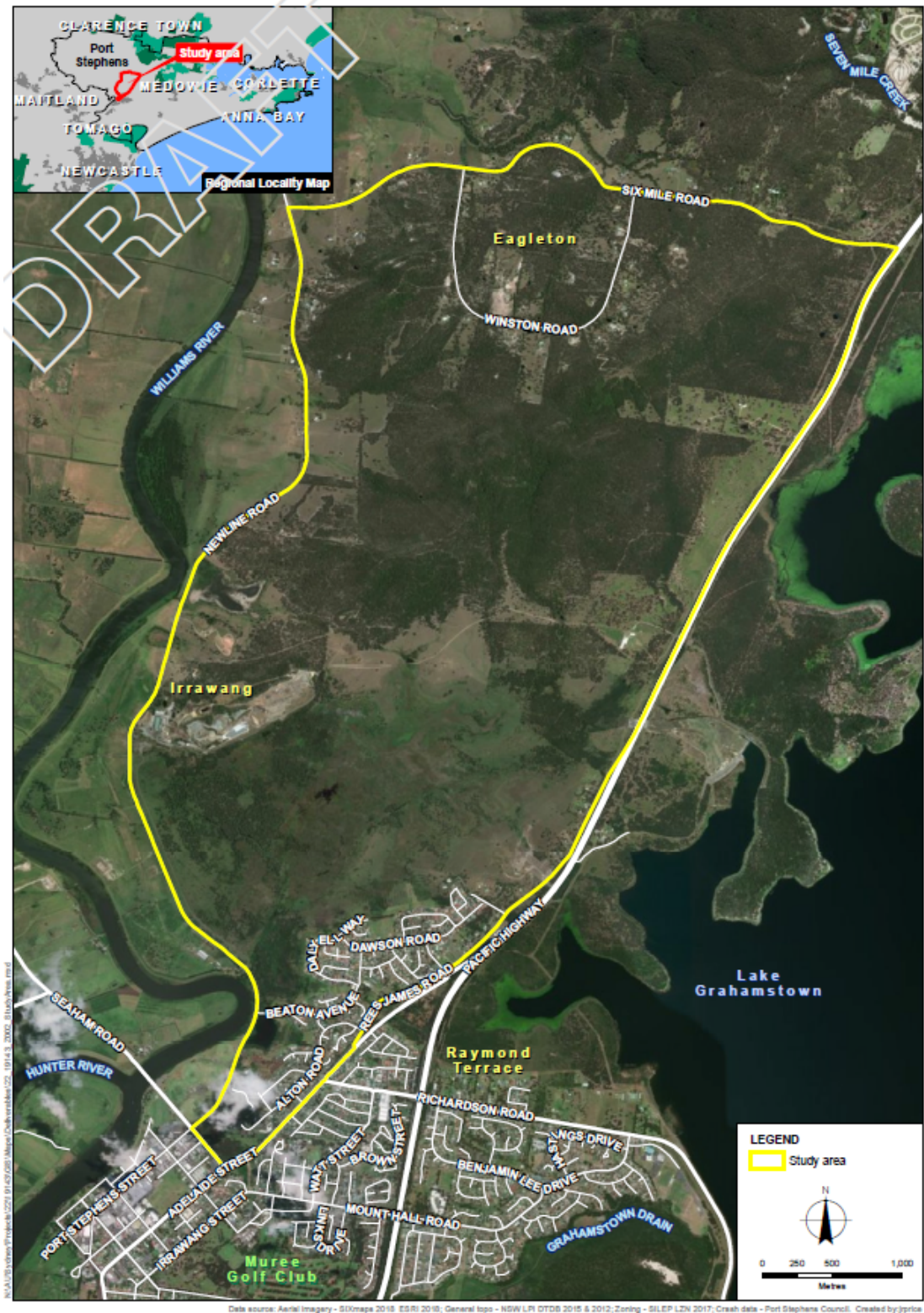
- To assess the traffic and transport impacts of the associated and revised lot yields for the proposed development at Kings Hill;
- To use the latest Roads and Maritime Services' (Roads and Maritime) traffic generation rates (as detailed in the *Technical Direction TDT 2013/04a - Guide to Traffic Generating Developments Updated traffic surveys, 2013*) in the assessment of the proposal;
- To consider the impacts of the revised traffic generation on the proposed road infrastructure upgrade requirements and their associated trigger points;
- To review impacts associated with changes to the proposed internal road network, without the proposed north-south road (due to issues with topography);
- To review recommendations provided from the *Flood Free Access Study* and update any proposed traffic and transport works required for Six Mile Road;
- To provide a general update to the 2013 Traffic and Transport Study document, including a review of planning policy, existing conditions, demographics and crash data; and
- To update the strategic cost estimates for proposed traffic and transport infrastructure upgrades. It should be noted that these cost estimates are strategic only and have not been based on concept designs.

This report has been prepared in accordance with the updated *Guide to Traffic Generating Developments* (Roads and Maritime, 2002) procedure manual where applicable.

1.3 Study Area

The study area for the Kings Hill Traffic and Transport study is shown in Figure 1-1.

Figure 1-1 Kings Hill Study Area



1.4 Study Limitations and Assumptions

Given the strategic nature of this assessment, traffic modelling has been undertaken at a high level and is based on a set of assumptions relating to the current traffic conditions, the future traffic demand and the future transportation network in the study area.

The study has been limited by the following characteristics:

- Weekday AM and PM peak intersection traffic surveys undertaken by TTM Pty. Ltd in September 2017;
- Information on the Kings Hill development proposals and staging, provided by PSC;
- No strategic or micro-simulation traffic modelling has been undertaken for this study;
- The assessment has been carried out at a high strategic level and will not be suitable for the purposes of Development Applications; and
- Cost estimate for proposed infrastructure are strategic only and have been developed based on benchmarking against similar projects.

The following assumptions were made as part of this study:

- Background traffic growth rates were based on annual average daily traffic (AADT) count data provided by Council and Roads and Maritime. The assumed traffic growth rates adopted to this study are as follows:
 - Pacific Highway – 2.9 percent per annum;
 - Newline Road – one percent growth per annum; and
 - All other roads in the study area – two percent growth per annum.
- Development trip rates provided from *Technical Direction TDT 2013/04a - Guide to Traffic Generating Developments Updated traffic surveys, and*
- Forecast development traffic distribution been based on data provided from the Australian Bureau of Statistics data (Census, 2016).

1.5 Stakeholder Consultation

In order to ensure the study address relevant issues and that the study assessment methodology would be acceptable to, and meet the requirements of the relevant stakeholders, GHD undertook consultation with Council, Roads and Maritime and landholders as part of the previous 2012 study. GHD also consulted again with PSC as part of this updated study in 2017.

1.6 Report Structure

The remainder of this report is structured as follows:

- **Section 2** - Planning Context : provides a summary of the implications of key planning policies, strategies and statutory documents reviewed as part of this study;
- **Section 3** - Existing Situation: describes existing traffic and transport characteristics, provides analysis of historical crash data and presents mid-block road link and intersection capacity assessments for the existing situation;
- **Section 4** - Committed Developments : outlines planned employment and residential developments in the region, planned transport infrastructure upgrades and forecast background traffic growth;
- **Section 5** - Proposed Kings Hill Development: outlines the development proposals for Kings Hill;
- **Section 6** - Traffic Impact Assessment: summarises the results of the mid-block road link and intersection capacity assessments (SIDRA traffic modelling);
- **Section 7** – Strategic Cost Estimates: provides high level costings for recommended infrastructure improvements; and
- **Section 8** – Summary and Recommendations: summarises the key findings of this study.

2. Planning Context

This section provides guidance on current key planning policies, strategies and statutory documents and its implications for the development of Kings Hill from a traffic and transport perspective.

2.1 National and State Planning Principles

A summary of the relevant state and national planning guidelines is provided in Appendix A. A summary of the following key documents is provided, which provide planning guidelines for new developments such as Kings Hill:

- National Urban Policy - 'Our Cities, Our Future' 2011;
- Integrating Land use and Transportation, TfNSW and Roads and Maritime, 2001;
- NSW 2021 Plan, NSW Government, 2011;
- NSW Long Term Transport Master Plan (Transport for NSW, updated 2014);
- Draft Future Transport Strategy 2056 (Transport for NSW, 2017);
- Draft Regional NSW Services and Infrastructure Plan; and
- Draft Greater Newcastle Future Transport Plan (Transport for NSW, 2017).

2.2 Local and Regional Planning Principles

Relevant regional and local based guidelines are as follows.

2.2.1 Hunter Regional Plan 2036

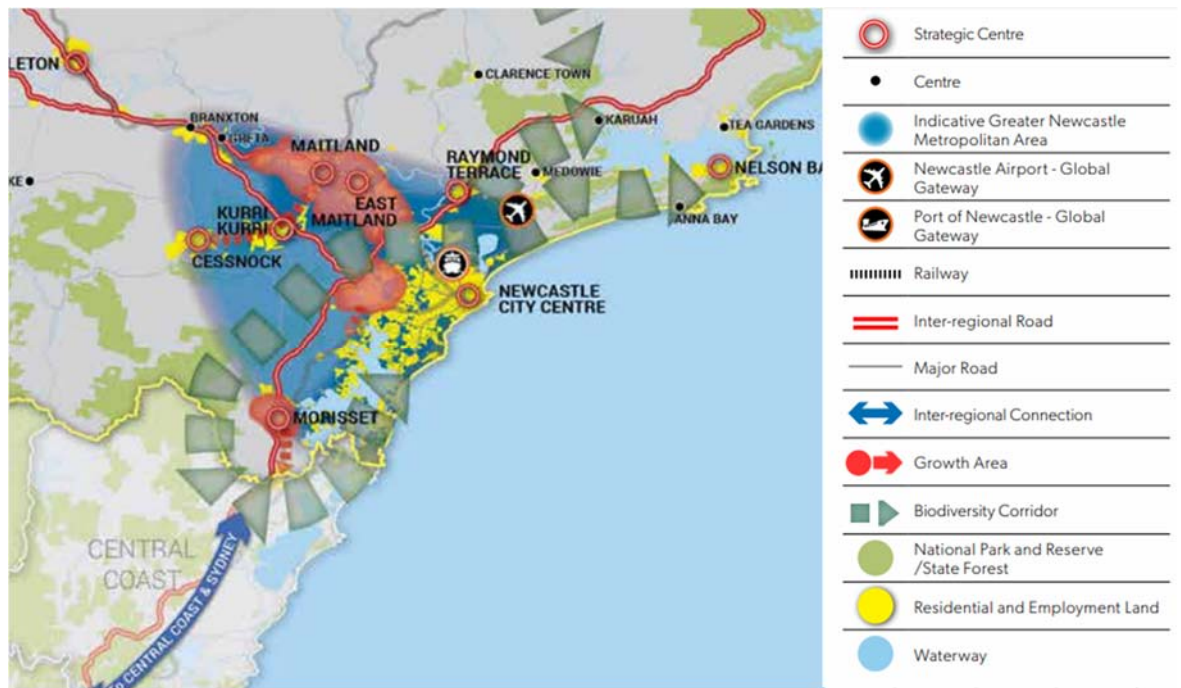
The Hunter Regional Plan 2036 (NSW Department of Planning and the Environment, 2016) is a 20 year blueprint for the future of the Hunter. The vision is to create a leading regional economy in Australia, with a vibrant metropolitan city at the heart. We will deliver our vision through four goals:

- A leading regional economy in Australia;
- A biodiversity-rich natural environment;
- Thriving communities; and
- Greater housing choice and jobs.

Raymond Terrace has been designated as a "Strategic Centre" in the *Hunter Regional Plan*, which is targeted to continue as the main service centre for the Port Stephens LGA, providing a range of facilities for surrounding communities, including retailing, government, civic and professional services. another identified priority for strategic centres includes investigating increasing social, transport and economic connections to surrounding communities and centres across the Greater Newcastle area.

Kings Hill is identified in the strategy as an existing Urban Release Area, for future housing and urban renewal opportunities.

Figure 2-1 Hunter Regional Plan 2036



Source: *Hunter Regional Plan 2036, 2016*

2.2.2 Port Stephens Development Control Plan (2014)

The PSC Development Control Plan (DCP) Part D – Specific Areas, details controls for the Kings Hill area.

The key objectives of the DCP with respect to traffic and transport are:

- To achieve connectivity between precincts, the local centre and nearby service areas
- To ensure Kings Hill has a defined transport structure and road hierarchy
- To ensure an east-west road link is provided between Newline Road and the Pacific Highway in a direct, timely and efficient manner
- To ensure the pedestrian and cycle network provides convenient and safe access to the precinct centres, schools, community facilities, open space and other important destinations outside of Kings Hill to encourage walking and cycling
- To ensure the Pacific Highway interchange is the primary access point to Kings Hill

The DCP specifies requirements for:

- Transport movement hierarchy
- Collector roads
- Pacific Highway Interchange access
- Public transport
- Pedestrian paths
- End of trip facilities

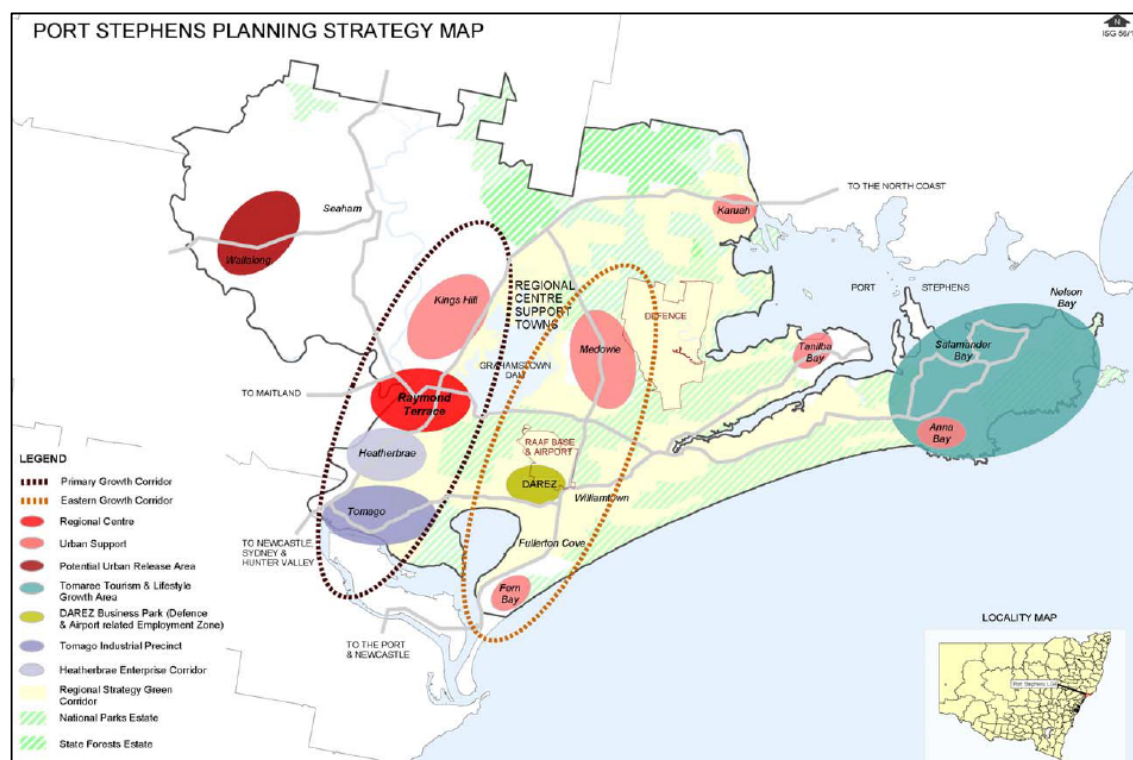
2.2.3 Port Stephens Planning Strategy (2011 – 2036)

The Port Stephens Planning Strategy (PSPS) was adopted by Council on the 20 December 2011. The PSPS responds to the State Government's Lower Hunter Regional Strategy and Lower Hunter Regional Conservation Plan by providing local level detail, and by incorporating the results of more recent studies, such as the Port Stephens Commercial and Industrial Land Study and the Rural Lands Study.

The primary purpose of the PSPS is to guide land use planning and decision making and consider environmental outcomes. The PSPS provides the framework for the broad strategic base to manage growth and is supplemented by the development of sub-strategies to provide an additional level of detail for specific areas or issues. These sub-strategies facilitate the release of urban lands and are supported by timely infrastructure provision. The new release areas include Kings Hill, Anna Bay and Medowie, the emerging Heatherbrae Enterprise Corridor and Defence and Airport Related Employment Zone Business Park, and the continued development of Raymond Terrace as the major regional centre.

The PSPS identifies the Kings Hill site as a major new release area with strategic level importance, which will have a population of 11,000 people at full development. The PSPS Map, shown in Figure 2-2, identifies the Kings Hill release area as an “urban support” area within the primary growth corridor in the PSC Local Government Area.

Figure 2-2 Port Stephens Planning Strategy Map



Source: *Port Stephens Planning Strategy, Port Stephens Council, 2011*

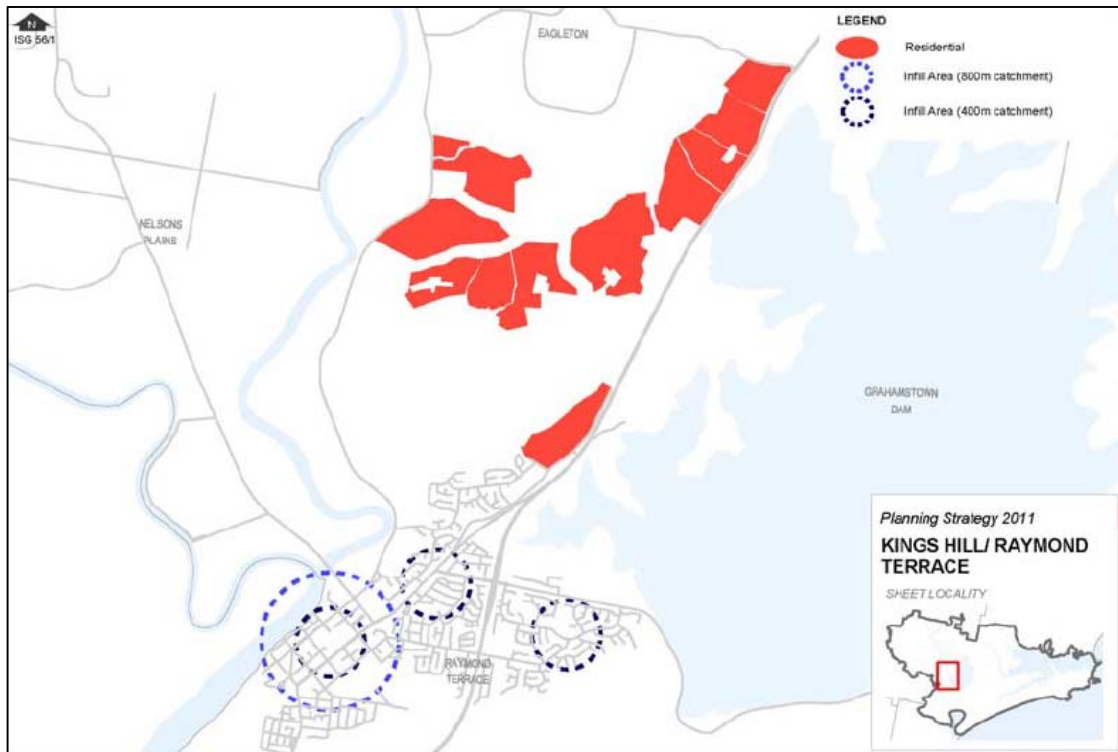
The PSPS also states that the development of the Kings Hill site will contribute to increase in the existing population in Raymond Terrace. Infill development within Raymond Terrace town will also contribute to population increase and is likely to be related to growth in dual occupancy, low-rise multi-unit and mixed-use development in the town centre.

The PSPS also states that the local population within Kings Hill release area would be serviced by retail commercial and other services situated in both Raymond Terrace and the proposed Kings Hill town centre. At full development, the town centre and other small village centres at Kings Hill collectively may have between 7,500 and 10,000 sqm of total floorspace.

An additional total of around 2200 sqm of retail floorspace could be supported at the neighbourhood centres within Kings Hill. The PSPS states that the Commercial and Industrial Lands Study recommended that retail and commercial floorspace in Kings Hill should be limited to that which serves the immediate population so as not to undermine the role of Raymond Terrace.

Figure 2-3 shows the proposed Kings Hill residential precincts as defined in the PSPS.

Figure 2-3 Kings Hill Residential Precincts



Source: Port Stephens Planning Strategy, Port Stephens Council, 2011

2.2.4 Kings Hill Local Environmental Study

The Kings Hill Local Environment Study undertook an environmental assessment of the proposed development of the King's Hill rezoned land.

The study had recommended that sufficient infrastructure be implemented to allow for the increase in residential demand. Infrastructure needs were identified to include traffic and transport, which should specify the following:

- The scale and type of infrastructure required;
- Location;
- Timing; and
- Funding arrangements.

These infrastructure-staging plans form part of the environmental management strategy and support the Structure Plan, and establish a logical framework for contributions within the proposed Section 94 plan.

2.2.5 Port Stephens Local Environmental Plan (2013)

Planning and development of the Kings Hill area is governed by the Port Stephens Local Environment Plan 2013 (LEP). The aims of the plan include:

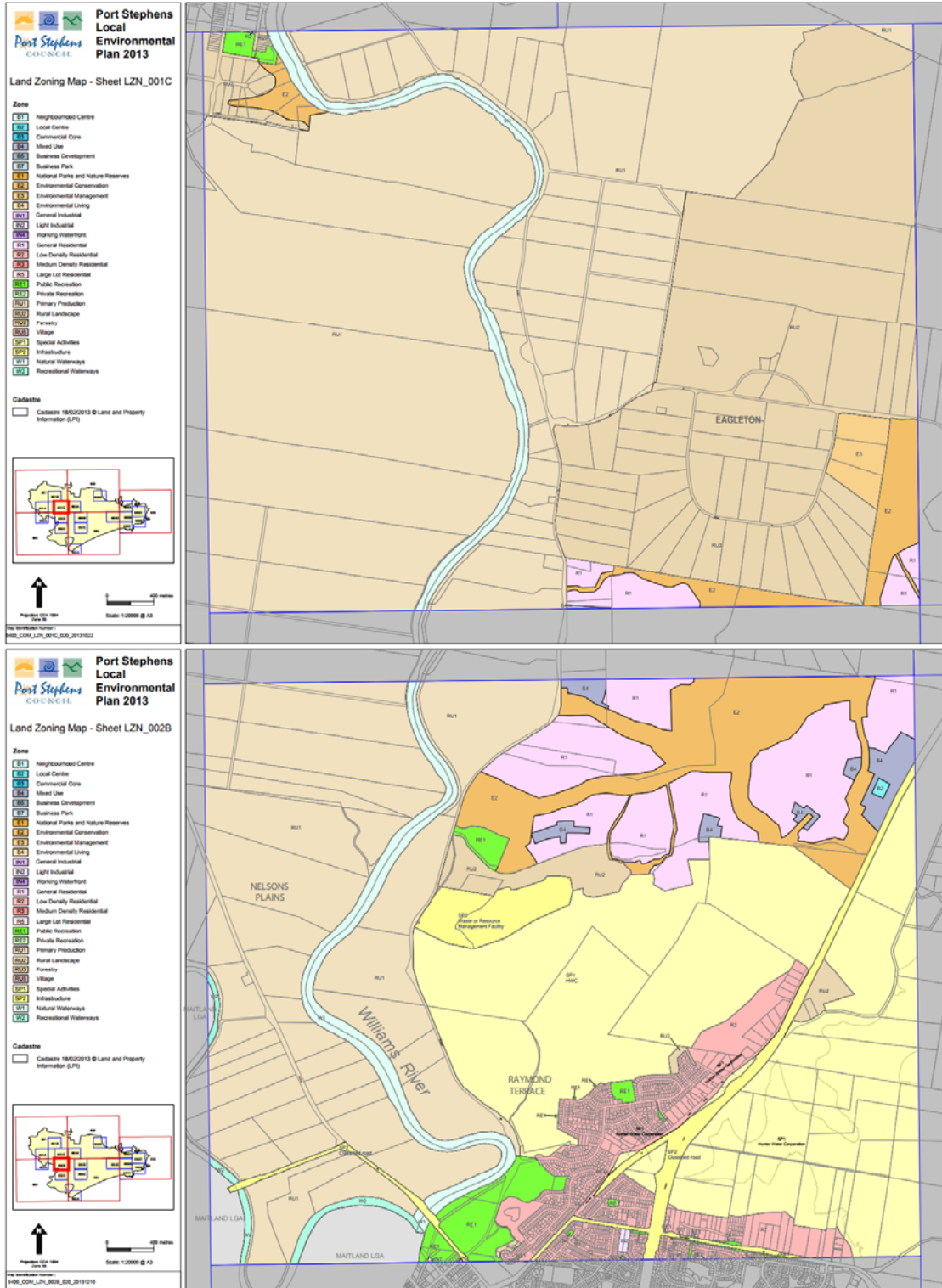
- To cultivate a sense of place that promotes community well being and quality of life;
- To provide for a diverse and compatible mix of land uses supported by sound planning policy to deliver high quality development and urban design outcomes;
- To continue to facilitate economic growth that contributes to long-term and self-sufficient employment locally; and
- To promote an integrated approach for the provision of infrastructure and transport services.

Whilst the Kings Hill area is yet to be developed, the current LEP makes provision for the development of a number of residential precincts within the study area. Figure 2-4 shows the proposed zoning of Kings Hill as defined in the LEP.

2.2.6 Port Stephens Commercial and Industrial Lands Study (2010)

The Commercial and Industrial Lands Study (CILS) identifies that Kings Hill is planned to accommodate a new town centre within the Port Stephens LGA. The study recognises that it is currently zoned for 'B2 and B4' Local Centre and Mixed Use, which is consistent with typical zoning for areas as town centres. The CILS noted that the development of Kings Hill could provide as many as 4,700 dwellings and 12,000 people over the next 20 years. Retail modelling as part of the study indicated that a development of this size could support up to 10,700 sqm of retail floor space including 2,500 sqm dedicated supermarket floor space. The study recommends that retail floor space is limited to serving the immediate population and does not undermine the role of Raymond Terrace.

Figure 2-4 Kings Hill Zoning Map



Source: Port Stephens Local Environmental Plan, Port Stephens Council, 2013

2.2.7 Raymond Terrace and Heatherbrae Strategy 2015 – 2031

The Raymond Terrace and Heatherbrae Strategy is an action plan that seeks to make Raymond Terrace and Heatherbrae a strong regional centre. A key direction includes:

Reinforce the role of Raymond Terrace as a prominent commercial centre to serve the needs of Kings Hill.

The strategy specifies that:

- New retail development in Kings Hill should reinforce the role Raymond Terrace as a key retail hub for the region.
- Pedestrian and bicycle paths have been identified to provide future connection to the urban release areas of Kings Hill.
- The intersection of Newline Road and Seaham Road will need to be upgraded as Kings Hill is developed.

2.3 Planning Principles

A summary of desirable integrated land use and transport planning principles which should be considered and used to guide the development of new large-scale urban settlements is provided in Appendix A. These include the following key considerations:

- A sustainable and balanced transport System;
- Transport network structure and functionality;
- Designing the road network;
- Public transport;
- Active transport; and
- Parking.

2.4 Planning Indicators (Assessment Criteria)

The ability of a new development, such as Kings Hill, to effectively manage travel and achieve more optimal transport outcomes can be better understood by carefully considering a response to the following important questions:

1. Does the site offer an opportunity to provide sustainable transport opportunities and choices over the long term?
2. Will the site achieve good levels of trip containment and a benchmark change in travel behaviour, how is this planned to be delivered and is it in accordance with tested precedents?
3. Can the site work and achieve good levels of trip containment without proposed transport initiatives?
4. Does the site encourage counter peak flow traffic generation to better optimise underutilised assets? Is it possible for the proposed land use mix to serve other local and regional needs?
6. Does the site plan align with transit-oriented development principles and the NSW 2021 Plan, by offering efficient and effective operations and connectivity to its surroundings and an internal network structure that is able to serve the majority of the development through one bus route?
7. Can travel within the site be achieved through an easy and safe bike ride?

8. Is the proposed Kings Hill development planned to encourage walking and are most trips walkable and would it be an enjoyable option that could serve most trip purposes?
9. Is network connectivity achieved and can the network structure offer a safe environment that acknowledges its surrounding land use and discourages faster travel speeds through urban areas?
10. Does the street network consider place and movement function as guided in the NSW Road Planning Framework (Roads and Maritime, September 2017)?

The above forms a checklist that is intended to provide a broad level of understanding of a new development's ability to achieve a desirable transport outcome, which aligns with longer-term policy targets and objectives and desirable design principles for urban growth in the Hunter Region.

3. Existing Situation

This section describes the existing traffic and transport characteristics, provides analysis of historical crash data and presents mid-block road link and intersection capacity assessments for the existing situation.

3.1 Site Location

As indicated in Figure 1.1, the Kings Hill release area is located to the north of Raymond Terrace and the Irrawang Spillway, and lies within a semi-rural area between Grahamstown Lake and the Williams River. The Kings Hill site is bounded by Newline Road to the west, Six Mile Road and Winston Road to the north, the Pacific Highway to the east and Irrawang Spillway to the south.

3.2 Land Uses

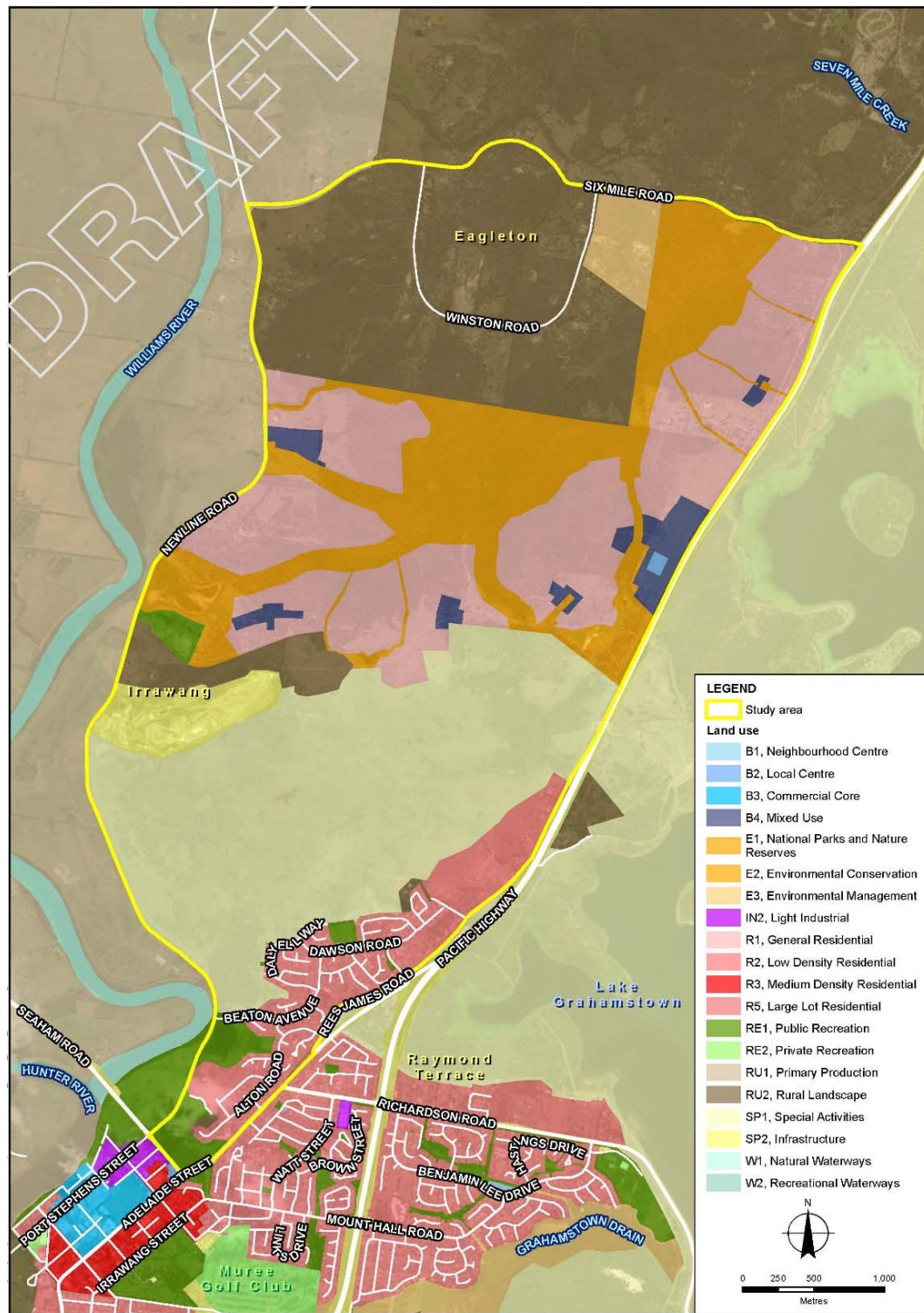
The site is primarily greenfield, with an isolated number of plots used for rural-residential, recreation and semi-industrial purposes.

Key land uses that are located within the vicinity of the site include:

- PSC Waste Processing Centre a municipal waste processing site located on Newline Road;
- Riding for the Disabled – a volunteer organisation which provides equine assisted activities for people with disabilities;
- Gilson Plant Hire – a plant hire business which provides earthmoving equipment;
- Grahamstown Dam and the Irrawang Wetlands;
- A number of rural residential properties situated along Six Mile Road, Newline Road and Winston Road; and
- A built-up residential area known as North Raymond Terrace bounded by Adelaide Street, William Bailey Street and Newline Road.

The land-zoning plan, based on the PSC Local Environmental Plan, for the study area is shown at Figure 3-1. This plan shows areas of general residential development within the Kings Hill sites, along with areas of mixed-use development. A commercial core is identified at the south-eastern section of the site. The remainder of the site is an environmental conservation area.

Figure 3-1 Land Zoning Plan



Data source: Aerial Imagery - Sixmaps 2018; ESRI 2018; General topo - NSW LPI DTDB 2015 & 2012; Zoning - SILEP LZN 2017; Crash data - Port Stephens Council. Created by jprice

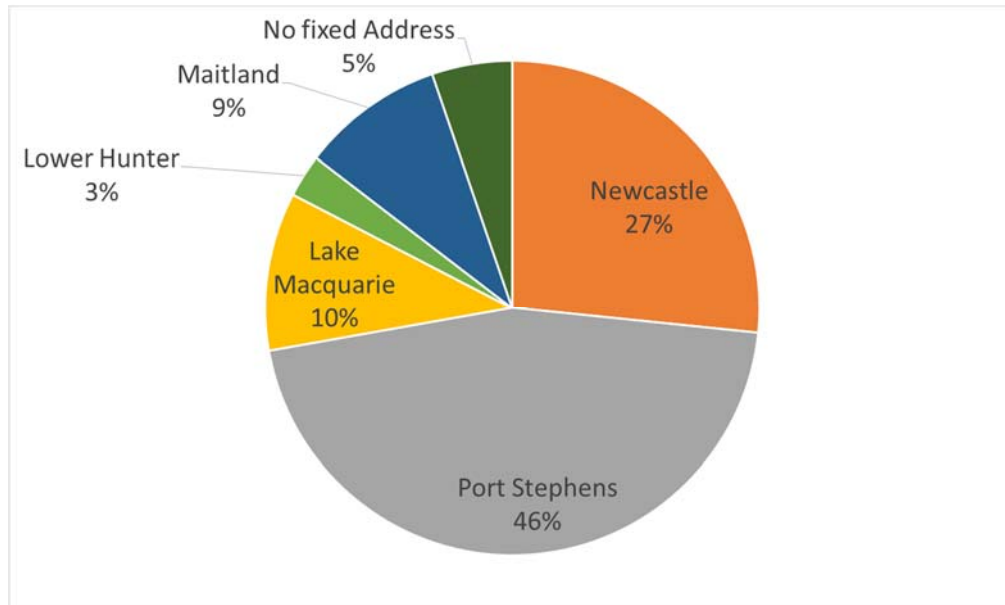
3.3 Existing Transport Context

3.3.1 Current JTW Travel Characteristics

Analysis of the Australian Bureau of Statistics (ABS) Census 2016 data has been undertaken to determine current Journey to Work (JTW) trends for people living in Raymond Terrace.

The normal place of work for people living in Raymond Terrace is summarised in Figure 3-2. The data indicates that people, currently residing in the study area, work in a variety of commercial centres and employment areas within Port Stephens, Newcastle and Lake Macquarie.

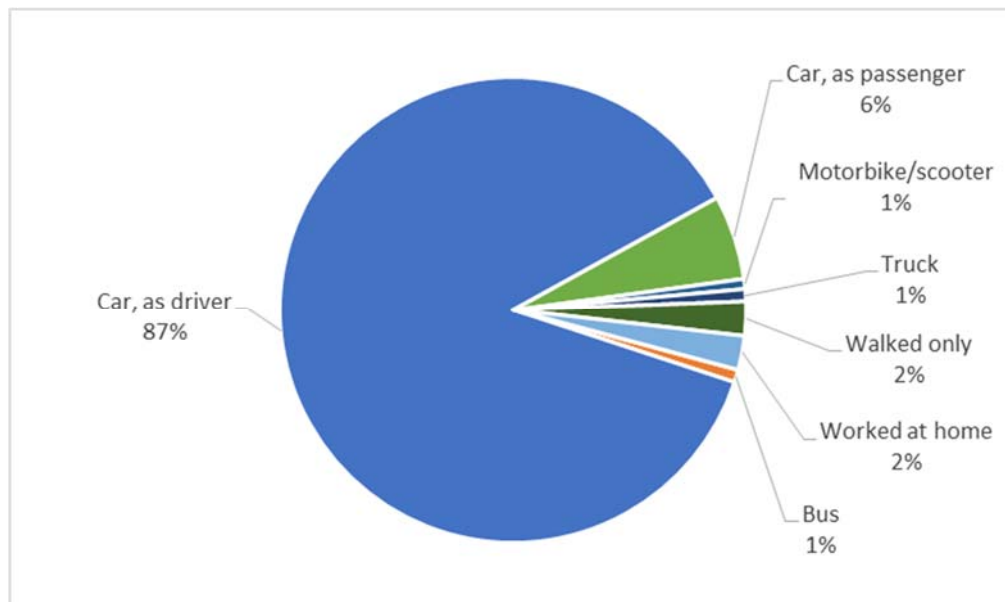
Figure 3-2 JTW Destinations for Raymond Terrace Residents



Source Australian Bureau of Statistics (ABS) JTW (2016 data)

Figure 3-3 shows the JTW travel mode for people living in Raymond Terrace. The data indicates that travel by private car is the dominant travel mode for journeys to work in Raymond Terrace. Approximately 93 percent of people travelled to work by car. The data shows that a low proportion of residents walked to work (two percent) or travelled by bus (one percent).

Figure 3-3 JTW Travel Mode for Raymond Terrace Residents



Source Australian Bureau of Statistics (ABS) JTW 2016 data

3.3.2 Existing Pedestrian and Cyclist Network

The existing pedestrian network within the study area is shown in Figure 3-4, which also shows the location of proposed land uses within the Kings Hill Site (based on the PSC Local Environmental Plan). There are currently no walking connections to the Kings Hill site.

Raymond Terrace has a number of shared paths and on-road bicycle routes, as shown in Figure 3-5. There are currently no bicycle connections to the Kings Hill site.

Figure 3-4 Existing Pedestrian Network

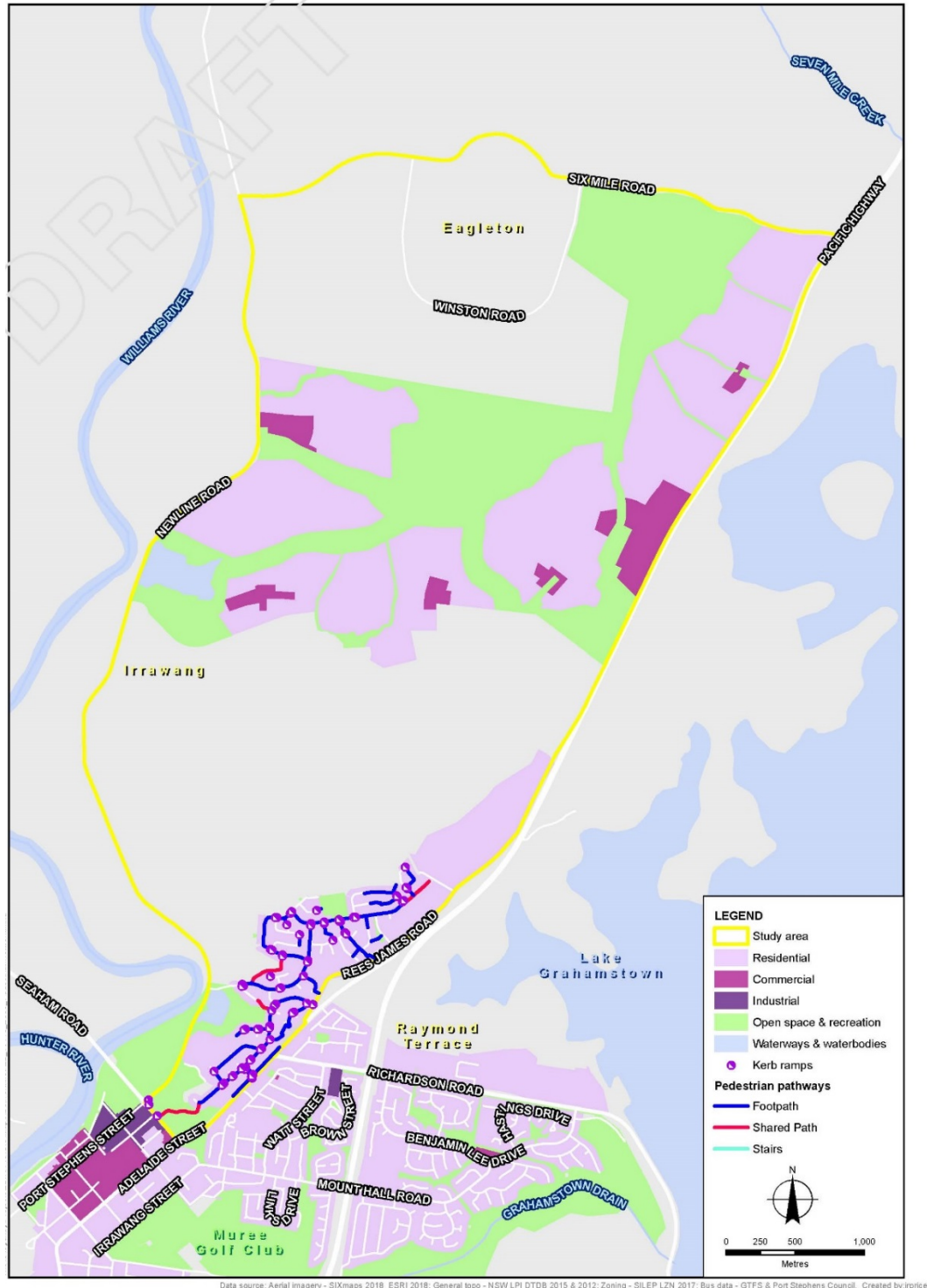
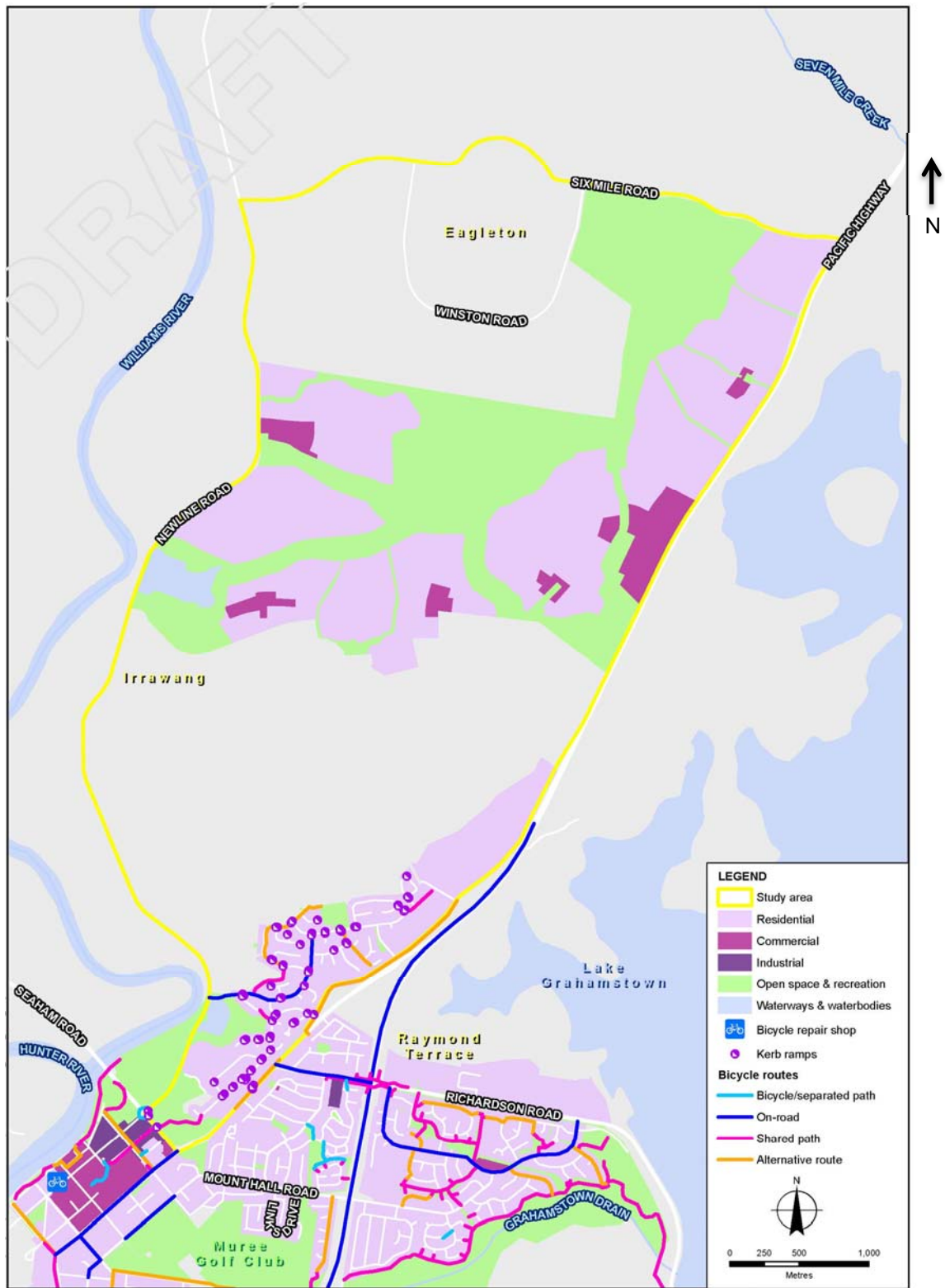


Figure 3-5 Existing Bicycle Network



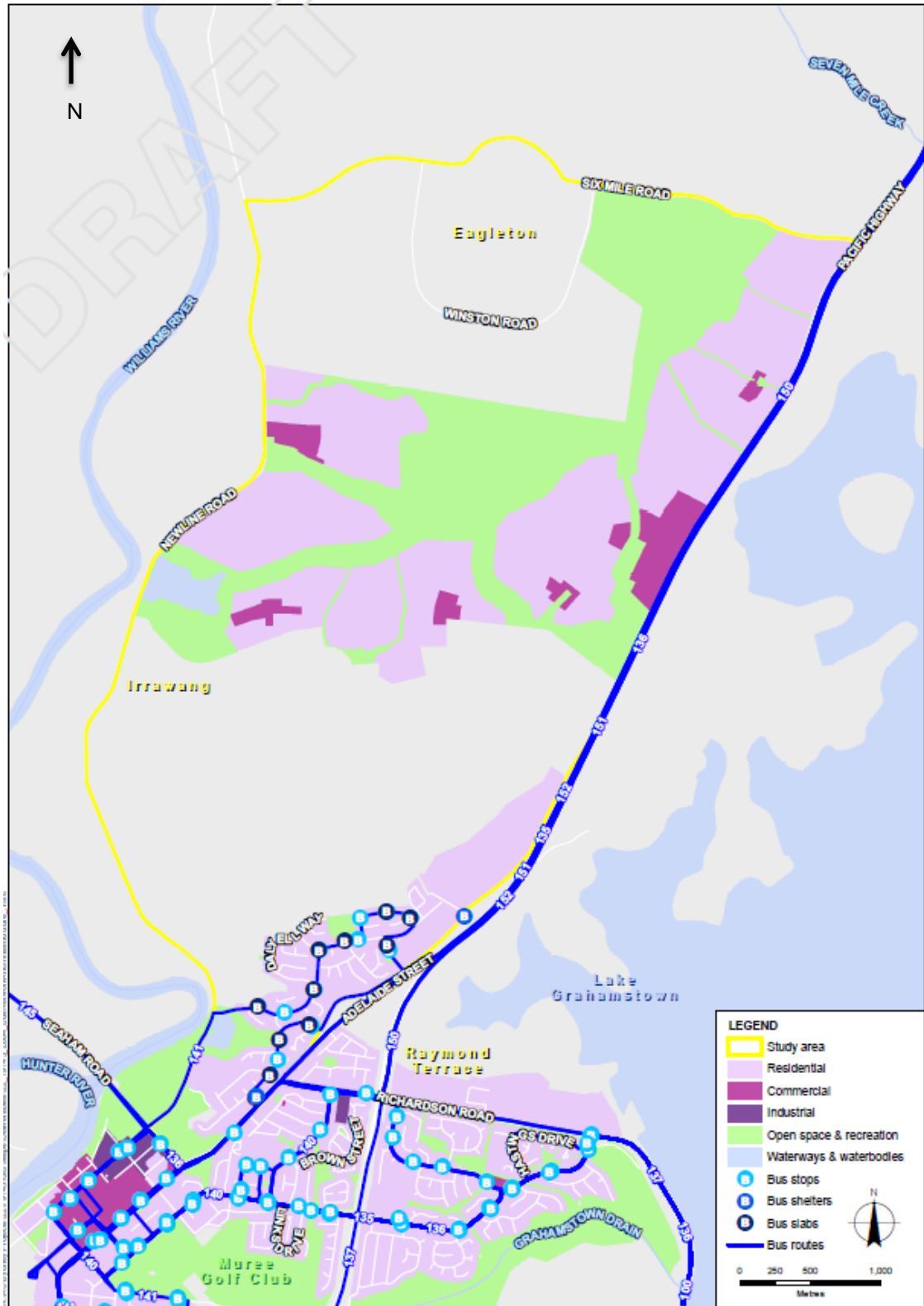
Data source: Aerial Imagery - Sixmaps 2018; ESRI 2018; General topo - NSW LPI DTDB 2015 & 2012; Zoning - SILEP LZN 2017; Bus data - GTFS & Port Stephens Council. Created by jprice

Source: Port Stephens Council, 2017

3.3.3 Existing Public Transport Network

The bus routes operating in the vicinity of the study area are shown in Figure 3-6. There are a number of routes, which operate in and around Raymond Terrace, passing through the southern section of the study area. There are no existing bus routes currently serving the Kings Hill site.

Figure 3-6 Existing Bus routes within Raymond Terrace/Kings Hill



Bus services in Raymond Terrace generally operate with a 60 minute frequency during peak periods. Route 140 to Newcastle operates services with a 30 minute frequency during peak periods. Table 3-1 shows the frequency of bus services for each of the routes operating in Raymond Terrace.

Table 3-1 Raymond Terrace Bus Frequency

Route	Description	Peak Periods	Off Peak	Night Time	Saturday	Sunday
136	Raymond Terrace to Stockton	60	60	-	60	120
137	Raymond Terrace to Lemon Tree Passage	60	120	-	120	2 trips
140	Newcastle to Lakeside Shops	30	60	2 trips	60	120
141	Raymond Terrace Town Service	60	60	-	120	-
145	Stockland Green Hills To Newcastle Airport	60	60	-	60	120

Source: Hunter Valley Buses Timetables and Maps, 2017

3.4 Existing Road Network

3.4.1 Road hierarchy

Roads within NSW are categorised in following two ways:

- By Classification (ownership)
- By the function that they perform.

Road Classification

Roads are Classified (as defined by the *Roads Act 1993*) based on their importance to the movement of people and goods within NSW (as a primary means of communication).

The classification of a road allows Roads and Maritime Services (Roads and Maritime) to exercise authority of all or part of the road. Classified roads include Main Roads, State Highways, Tourist Roads, Secondary Roads, Tollways, Freeways and Transitways.

For management purposes, Roads and Maritime has three administrative classes of roads. These are:

- **State Roads** – Major arterial links through NSW and within major urban areas. They are the principle traffic carrying roads and fully controlled by Roads and Maritime with maintenance fully funded by Roads and Maritime. State Roads include all Tollways, Freeways and Transitways; and all or part of a Main Road, Tourist Road or State Highway.
- **Regional Roads** – Roads of secondary importance between State Roads and Local Roads which, with State Roads provide the main connections to and between smaller towns and perform a sub arterial function in major urban areas. Regional roads are the responsibility of councils for maintenance funding, though Roads and Maritime funds some maintenance based on traffic and infrastructure. Traffic management on Regional Roads is controlled under the delegations to local government from Roads and Maritime. Regional Roads may be all or part of a Main Road, Secondary Road, Tourist Road or State Highway; or other roads as determined by Roads and Maritime.
- **Local Roads** – The remainder of the council controlled roads. Local Roads are the responsibility of councils for maintenance funding. Roads and Maritime may fund some maintenance and improvements based on specific programs (e.g. urban bus routes, road

safety programs). Traffic management on Local Roads is controlled under the delegations to local government from Roads and Maritime.

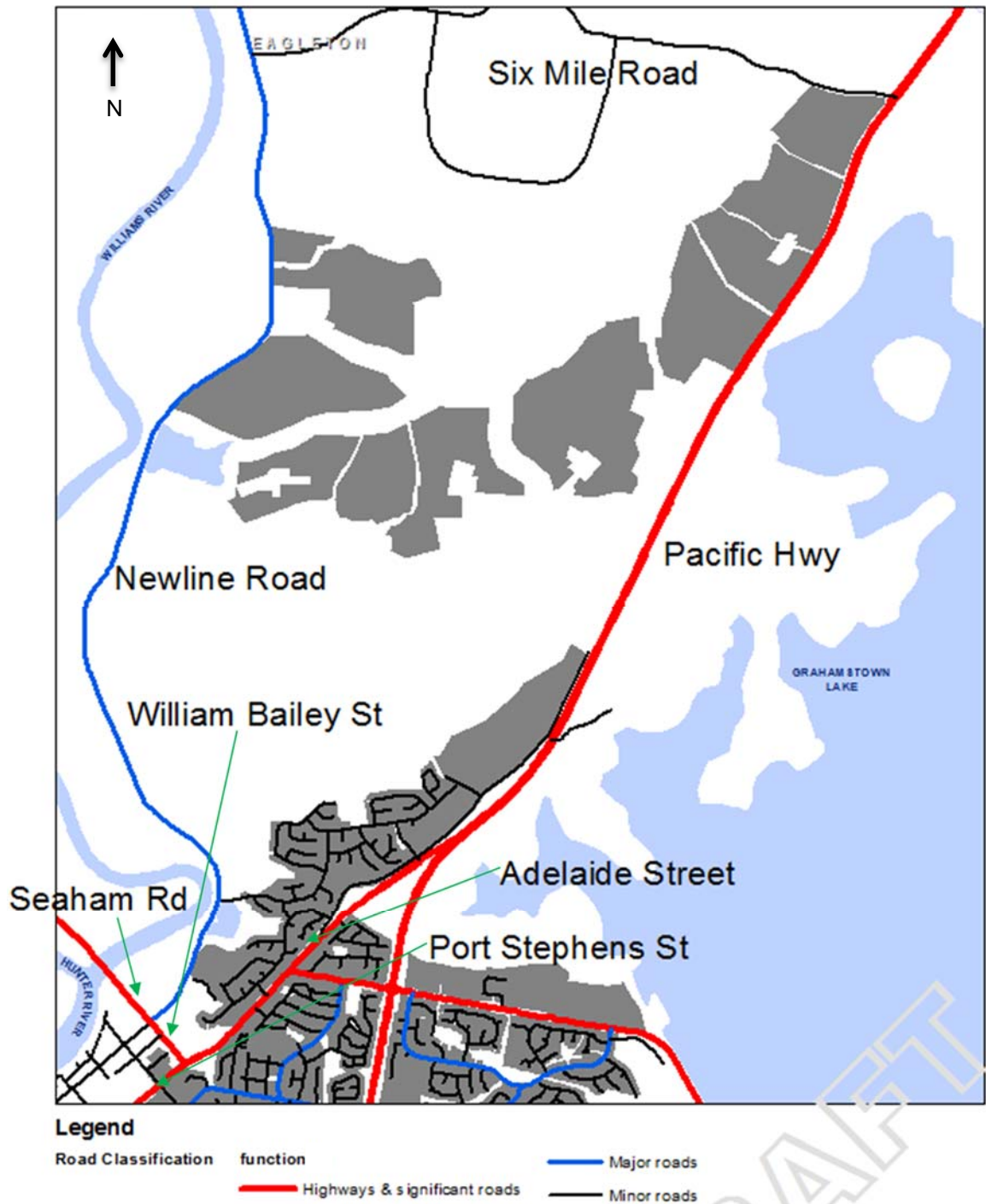
Functional Hierarchy

Functional road classification involves the relative balance of the mobility and access functions. Roads and Maritime define four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

- **Arterial Roads** – generally controlled by Roads and Maritime, typically no limit in flow and designed to carry vehicles long distance between regional centres.
- **Sub-Arterial Roads** – can be managed by either Roads and Maritime or local council. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region, or provide connectivity from arterial road routes (regional links).
- **Collector Roads** – provide connectivity between local roads and the-arterial road network and typically carry between 2,000 and 10,000 vehicles per day.
- **Local Roads** – provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

The existing road network in the vicinity of Kings Hill is shown in Figure 3-7.

Figure 3-7 Kings Hill Existing Road Network



Pacific Highway

Pacific Highway is summarised by the following:

- It is a national transport road corridor that links Sydney and Brisbane.
- It forms the eastern boundary of Kings Hill, north of Adelaide Street.
- Direct connections to the Pacific Highway are provided at Adelaide Street in the south for northbound traffic, via a grade separated interchange at Richardson Road, and an at-grade intersection at Six Mile Road in the north.
- Access at Six Mile Road to the Pacific Highway is controlled currently under a 'sea gull' intersection arrangement.

Pacific Highway generally has two traffic lanes in each direction between Adelaide Street and Six Mile Road and a speed limit, which varies between 100 km/h and 110 km/h.

Figure 3-8 – Pacific Highway facing south at Six Mile Road



Newline Road

Newline Road is summarised by the following:

- Functions as a two-way, two-lane, rural collector road. Its speed limit varies between 60 km/h and to 80 km/h between William Bailey Street and an area to the north of the Beaton Avenue, and increased to 100 km/h beyond this point.
- Provides an alternate route from Raymond Terrace to Seaham via Eagleton, and forms the western boundary of the Kings Hill area.
- Intersects with William Bailey Street at a roundabout at its southern end and with Six Mile Road at an uncontrolled intersection at the northwest corner of the Kings Hill area.
- Is subject to flooding during major storm events.

Figure 3-9 – Newline Road facing north towards Six Mile Road



William Bailey Street

William Bailey Street is summarised by the following:

- It is located along the southern edge of Kings Hill study area.
- It links with Adelaide Street to the east and to Seaham Road to the west, which is a continuation of William Bailey Street travelling to Seaham across the Hunter River.

- The Adelaide Street / William Bailey Street intersection to the east was upgraded to a signalised intersection funded through the Blackspot program and at the western end the intersection with Newline Road is controlled by a two lane roundabout.
- It has one traffic lane per direction between the approaches to the Adelaide Street and the Port Stephens Street intersections.

Figure 3-10 - William Bailey Street facing east



Adelaide Street

Adelaide Street is summarised by the following:

- It forms part of the old Pacific Highway alignment, which was bypassed between Heatherbrae in the south and Ferodale in the north in 1998. Adelaide Street forms the south-eastern boundary of Kings Hill study area between William Bailey Street and the Pacific Highway.
- It serves as a principal through traffic route to Raymond Terrace, and provides access to key regional roads, Raymond Terrace town centre and residential precincts.
- It provides a connection to Richardson Road, forms a grade separated interchange with the Pacific Highway.
- It generally has one traffic lane in each direction between William Bailey Street and the Pacific Highway and sign posted speed limit, which varies between 50 and 60 km/h. To the south of William Bailey Street, it has two traffic lanes in each direction.

Figure 3-11 - Adelaide Street facing north towards William Bailey Street



Six Mile Road

Six Mile Road is a two-way, two traffic lane rural collector road with an east-west orientation, which forms the northern boundary of Kings Hill. It is sealed for the majority of its length, with an unsealed section at its eastern end and a sign posted speed limit of 80 km/h.

It forms the minor approach of a seagull intersection with the Pacific Highway and a priority controlled intersection with Newline Road at its western end. Six Mile Road is subject to flooding during major storm events.

Figure 3-12 – Six Mile Road facing east near Newline Road



3.4.2 Classification of Existing Roads

Average Daily Traffic volumes were obtained from the Roads and Maritime Traffic website, and are summarised in Table 3-2. The data shows that daily traffic volumes on all roads typically fall within their position within the functional road hierarchy.

Table 3-2 Average Daily Traffic

Road	Average Daily Traffic	Classification
Pacific Highway, east of The Bucketts Way	17,780***	Motorways/Freeways
Adelaide Street, north of Richardson Road	4,440*	Collector Road
Adelaide Street, north of William Bailey Street	9,810**	Collector Road
Richardson Road, east of Adelaide Street	14,480**	Sub-Arterial Road

Source: *NSW Roads and Maritime Services, 2012*

* Roads and Maritime 2008 ADT Data

** Roads and Maritime 2010 ADT Data

*** Roads and Maritime 2010 and 2017 combined ADT Data

3.5 Assessment Criteria

The following assessment criteria has been applied to evaluate the performance of the existing road network.

3.5.1 Mid-block Assessment Criteria

Urban Streets

The AUSTRROADS Guide to Traffic Management – Part 3: Traffic Studies and Analysis (2017) defines “capacity” in accordance with the *Highway Capacity Manual* (Transport Research Board, 2016) as follows:

Capacity is the maximum hourly rate at which persons or vehicles can be reasonably expected to traverse a point or uniform section of lane or roadway during a given time period under the prevailing roadway, traffic and control conditions. Typical roadway capacities for urban streets with interrupted flows are given below in Table 3-3 and will be used to assess the impact of background traffic growth and development traffic on the road network.

Table 3-3 Typical Mid-block Capacities for Urban Streets

Type of Lane	One-Way Mid-block Capacity (vph*)
Divided Highway	2,000
Divided Road	1,000
Median or inner lane	900
Undivided Road	900

Source: *Guide to Traffic Management: Part 3 – Traffic Studies and Analysis (2017)*

*vehicles per hour per traffic lane

The midblock capacity can be used as a gauge to determine how much available capacity there is on a section of road, based on existing conditions, and whether it is likely to be able to accommodate an increased traffic load.

The AUSTRROADS *Guide to Traffic Management – Part 3: Traffic Studies and Analysis* (AUSTRROADS, 2017) outlines Level of Service criteria for mid-block sections of road based on volume-to-capacity ratios (VCR). The ‘Level of Service’ (or LoS) is the standard measure used to understand the operational performance of the network and intersections. This is defined as the qualitative assessment of the quantitative effect of factors such as speed, traffic volume, geometric features, delays and freedom of movement. A summary of these Levels of Service is provided in Table 3-4.

Table 3-4 Level of Service Descriptions for Urban Streets

LOS	Uninterrupted Flow Facilities	Interrupted Flow Facilities	VCR Range
A	Free flow conditions in which individual drivers are unaffected by the presence of others in the traffic stream.	Primarily free flow operations at average travel speeds and vehicles are completely unimpeded in their ability to manoeuvre within the traffic stream.	0.00 to 0.34
B	Zone of stable flow and drivers still have reasonable freedom to select their desired speed and to manoeuvre within the traffic stream.	Reasonably unimpeded operations at average travel speeds.	0.35 to 0.50
C	Also in the zone of stable flow, but most drivers are restricted to some extent in their freedom to select their desired speed and to manoeuvre within the traffic stream.	Stable operations; however ability to manoeuvre and change lanes in mid-block locations may be more restricted and intersection controls may contribute to lower average travel speeds.	0.51 to 0.74
D	Close to the limit of stable flow and is approaching unstable flow. All drivers are severely restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream.	A range in which small increases in flow may cause substantial increases in delay and decreases in travel speed.	0.75 to 0.89
E	Occurs when traffic volumes are at or close to capacity, and there is virtually no freedom to select desired speeds or to manoeuvre within the traffic stream.	Characterised by significant delays and reductions in average speed.	0.90 to 0.99
F	In the zone of forced flow and flow breakdown, this results in queuing and delays.	Characterised by urban street flow at extremely low speeds and Intersection congestion is likely at critical locations.	1.0 or greater.

Source: Adapted from AUSTRROADS Guide to Traffic Management - Part 3: Traffic Studies and Analysis (2017)

The criteria for evaluating satisfactory midblock performance of roads is for all road sections to perform at a LoS of D or better during typical weekday peak periods.

Rural Roads

The midblock capacity assessment criteria for rural roads in the study area, including Newline Road and Six Mile Road has been undertaken in accordance with methods in Section 20 of the Highway Capacity Manual (2010). This method considers percentage of passing locations along a stretch of road, as well as travel speeds, road width and number of driveways. The Highway Capacity Manual tool calculates the Level of Service criteria, which is shown in Table 3-5 for Newline Road and Six Mile Road.

Table 3-5 Midblock Level of Service Criteria – Rural Roads

Road	LoS – Hourly Volume in Both Directions				
	A	B	C	D	E
Newline Road	-	-	220	630	1,870
Six Mile Road	-	-	320	790	1,870

Source: Highway Capacity Manual (2010)

Pacific Highway

The midblock capacity assessment criteria for the Pacific Highway has been undertaken in accordance with the midblock Level of Service Criteria for two freeways the Highway Capacity Manual (2010).

Table 3-6 Midblock Level of Service Criteria – Freeways (One Direction)

Road	LoS – Hourly Volume for Two Lane Freeway (110km/h)				
	A	B	C	D	E
Pacific Highway	1,440	2,260	3,150	3,770	4,120

Source: Highway Capacity Manual (2010) – Exhibit 13.-

3.5.2 Intersection Assessment Criteria

The ‘Level of Service’ (or LoS) is the standard measure used to understand the operational performance of the network and intersections. This is defined as the qualitative assessment of the quantitative effect of factors such as speed, traffic volume, geometric features, delays and freedom of movement. The level of service concept is applied to intersections through measures of effectiveness, as summarised in Table 3-7.

Table 3-7 Measures of Effectiveness for Level of Service Definition for Intersections

Intersection Control	Measure of Effectiveness
Priority controlled	Degree of Saturation Delay to critical movements (sec/vehicle) Queue length for critical movements
Traffic Signals	Average Delay (sec/vehicle) Delay to critical movements Degree of Saturation Cycle Length Queue length for critical movements
Roundabout	Average Delay (sec/vehicle) Delay to critical movements Degree of Saturation Queue length for critical movements

The assessment of intersection operation is based on criteria outlined in Table 3-8, as defined by the Roads and Maritime (*Guide to Traffic Generating Developments*, Roads and Maritime, 2002).

Table 3-8 Intersection LoS Assessment Criteria

LOS	Average Delay/ Vehicle (secs)	Traffic Signals & Roundabouts	Give-way & Stop signs
A	Less than 15	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	28 to 42	Satisfactory	Satisfactory, but accident study required
D	42 to 56	Operating near capacity	Near capacity, accident study required
E	56 to 70	At capacity, excessive delays; roundabout requires other control mode	At capacity; requires other control mode
F	exceeding 70	Unsatisfactory; requires additional capacity	Unsatisfactory, requires other control mode.

Source: *Guide to Traffic Generating Developments, Roads and Maritime, 2002*

Note:

- *The average delay assessed for signalised intersections is over all movements.*
- *For roundabouts and priority control intersections (with Stop and Give Way signs or operating under the T-junction rule), the critical criterion for assessment is the movement with the highest delay per vehicle.*
- *Average delay is expressed in seconds per vehicle.*

The operational performance of intersections has been assessed using SIDRA Intersection analysis software tool. Level of Service (LoS) 'D' is generally an accepted operating condition along urban roads.

SIDRA calculates the amount of delay experienced by vehicles using an intersection, and gives a LoS rating to relate this to the operating performance for the intersection as a whole and for each movement.

3.6 2017 Traffic Count Data

Intersection traffic counts were undertaken on Thursday 14th April 2017, between 7-10 am and between 3-6 pm. The surveys recorded classified vehicle turning movements for light and heavy rigid vehicles, articulated vehicles and buses at the following intersections:

- Newline Road/William Bailey Street/Seaham Road/Port Stephens Street roundabout;
- Newline Road/Six Mile Road;
- Newline Road/Beaton Avenue;
- Newline Road/Waste Management Centre access;
- William Bailey Street/Adelaide Street; and
- Six Mile Road/Pacific Highway.

3.7 Midblock Capacity Assessments – Existing Situation

A review of existing midblock LoS has been undertaken for the worst-case direction (highest flow) for the urban roads and Pacific Highway, and two-way flows for the rural roads. This has been undertaken for the weekday AM and PM peak periods, based on the 2017 surveyed traffic flows. Table 3-9 provides a summary of the midblock LoS during each peak for the existing situation.

Table 3-9 2017 Existing Conditions Midblock Assessment

Road	Capacity	AM			PM		
		Veh/h.	V/C	LOS	Veh/h	V/C	LOS
Newline Road* (two way)	630	277	-	B	376	-	C
William Bailey Street*	900	769	0.85	D	858	0.95	E
Adelaide Street*	900	885	0.98	E	933	1.04	F
Seaham Road	900	794	0.88	D	927	1.03	F
Port Stephens Street	900	687	0.76	D	774	0.86	D
Pacific Highway (x2 lanes)*	3,770	738	-	A	795	-	A
Six Mile Road*(two way)	790	22	-	A	14	-	A

Note:

- Adelaide Street - north of William Bailey Street.
- William Bailey Street – east of Newline Road.
- Newline Road - north of William Bailey Street.
- Pacific Highway – south of Kings Hill (north of Adelaide Street)
- Six Mile Road –west of Pacific Highway

The assessment of midblock performance on the existing road network indicated that:

- Newline Road, Pacific Highway, Port Stephens Street and Six Mile Road currently operate with satisfactory performance and spare capacity with both peak periods;
- Adelaide Street, and Seaham Road are operating at LoS F in the PM peak
- William Bailey Street is operating at capacity with LoS E in the PM peak.

Based on the above analysis indicates that a number of roads in the study area are already operating over their theoretical midblock capacity.

3.8 Intersection Capacity Assessments – Existing Situation

The capacity and Level of Service (LoS) analysis has been carried out for key intersections during AM and PM weekday peak period conditions using the SIDRA 7 intersection modelling software. SIDRA calculates capacities, queue lengths and delays for traffic signals, roundabouts and priority-controlled intersections.

The following sections discuss the results of the SIDRA analysis for the existing situation.

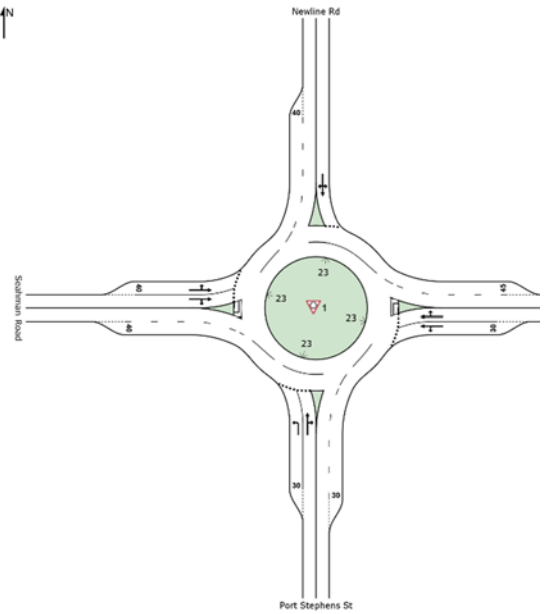
3.8.1 William Bailey Street/Newline Road Intersection

William Bailey Street forms the south-eastern approach of a four-arm roundabout intersection with Newline Road, Port Stephens Street and Seaham Road. This intersection provides the primary access route between the site and Raymond Terrace Town Centre. The current configuration of the intersection is shown in Figure 3-13.

Figure 3-13 William Bailey Street/Newline Road Intersection



Source of Aerial Photography: Google Maps, 2017



Source: SIDRA 7 Model Layout

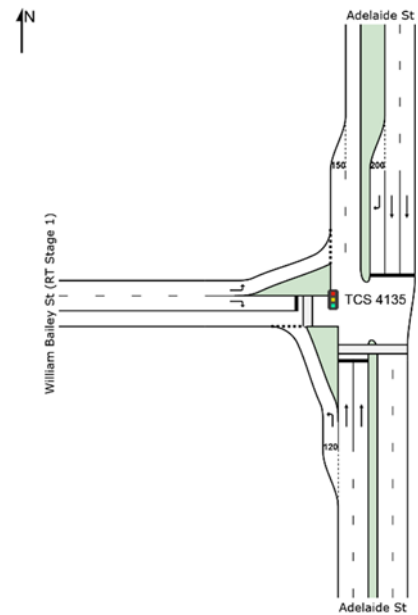
3.8.2 Adelaide Street/William Bailey Street Intersection

William Bailey Street/Adelaide Street intersection configuration is shown in Figure 3-14.

Figure 3-14 Adelaide Street/William Bailey Street Intersection Configuration



Source of Aerial Photography: Google maps, 2017



Source: SIDRA Model Layout

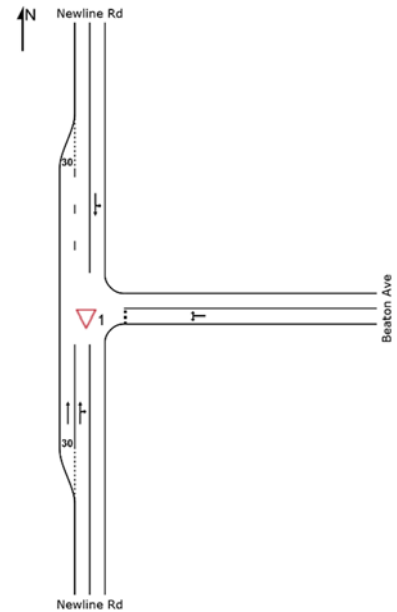
3.8.3 Beaton Avenue/Newline Road Intersection

The Beaton Avenue/Newline Road intersection is a priority controlled T-intersection, as shown in Figure 3-15.

Figure 3-15 Beaton Avenue/Newline Road Intersection Configuration



Source of Aerial Photography: Google Maps, 2017

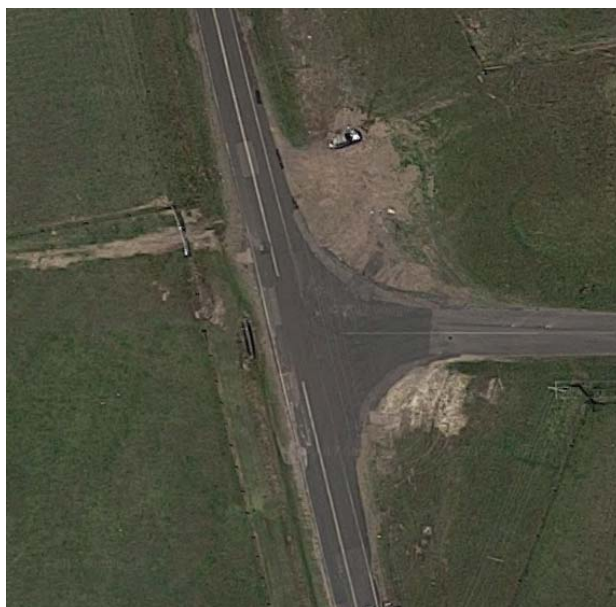


Source: SIDRA 7 Model Layout

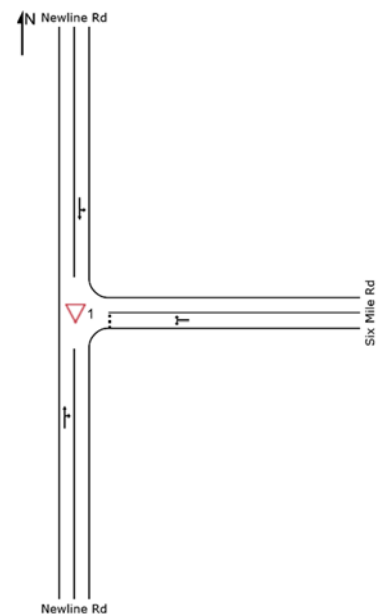
3.8.4 Six Mile Road/Newline Road Intersection

Six Mile Road forms the minor arm of a priority controlled T-intersection with Newline Road, as shown in Figure 3-16.

Figure 3-16 Six Mile Road / Newline Road Intersection Configuration



Source of Aerial Photography: Google Maps 2017



Source: SIDRA 7 Model Layout

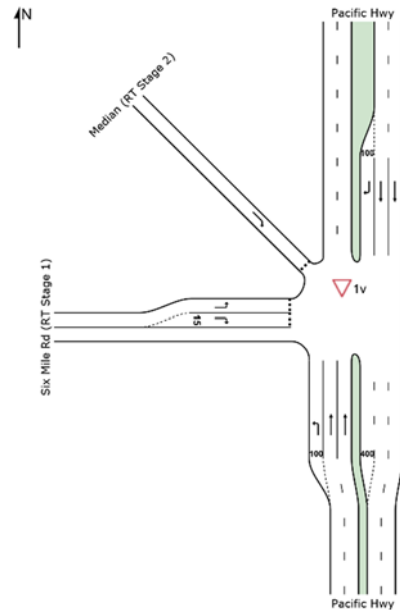
3.8.5 Six Mile Road/Pacific Highway Intersection

Six Mile Road forms the minor arm of a priority controlled 'seagull' intersects with the Pacific Highway as shown in Figure 3-17.

Figure 3-17 Six Mile Road / Pacific Highway Intersection Configuration



Source of Aerial Photography: Google Maps 2017



Source: SIDRA 7 Model Layout

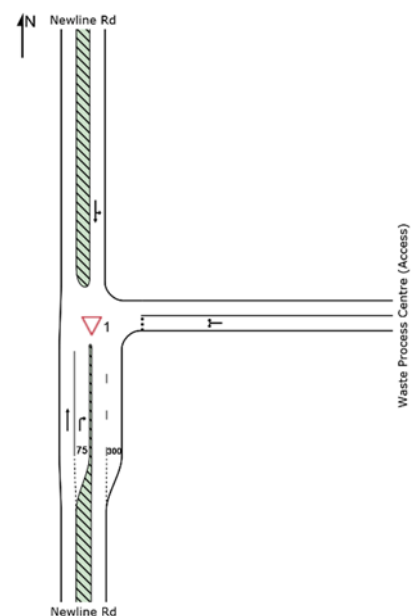
3.8.6 Port Stephens Waste Processing Centre/Newline Road Intersection

The Port Stephens Waste Processing Centre access road forms the minor arm of a priority controlled T-intersection with Newline Road, as shown in Figure 3-18. A channelised right turn into the Waste Centre is provided.

Figure 3-18 Port Stephens Waste Processing Centre / Newline Road Intersection Configuration



Source of Aerial Photography: Google Maps, 2017



Source: SIDRA 7 Model Layout

3.8.7 Existing SIDRA results summary

A summary of the SIDRA modelling results for the existing situation is provided in Table 3-10. The SIDRA modelling indicates that all of the intersections assessed currently operate satisfactorily.

Table 3-10 Existing 2017 SIDRA results summary

Intersection	AM Peak				PM Peak			
	Average Delay (s)	LoS	Degree of Saturation	95% Queue (m)	Average Delay (s)	LoS	Degree of Saturation	95% Queue (m)
Newline Road /Seaham Road /William Bailey Road	13	A	0.44	25 (E.)	14	A	0.55	35 (S)
Newline Road and Six Mile Road	8	A	0.02	5	8	A	0.04	5 (S)
Newline Road and Beaton Avenue	8	A	0.08	5 (E.)	7	A	0.12	5
Newline Road and Waste Management Centre	9	A	0.02	5 (E.)	9	A	0.03	5(E.)
Adelaide Street and William Bailey Street	18	B	0.58	115 (W)	20	B	0.62	90 (W)
Pacific Highway and Six Mile Road	12	A	0.23	5 (W)	18	B	0.24	5 (W)

Note:

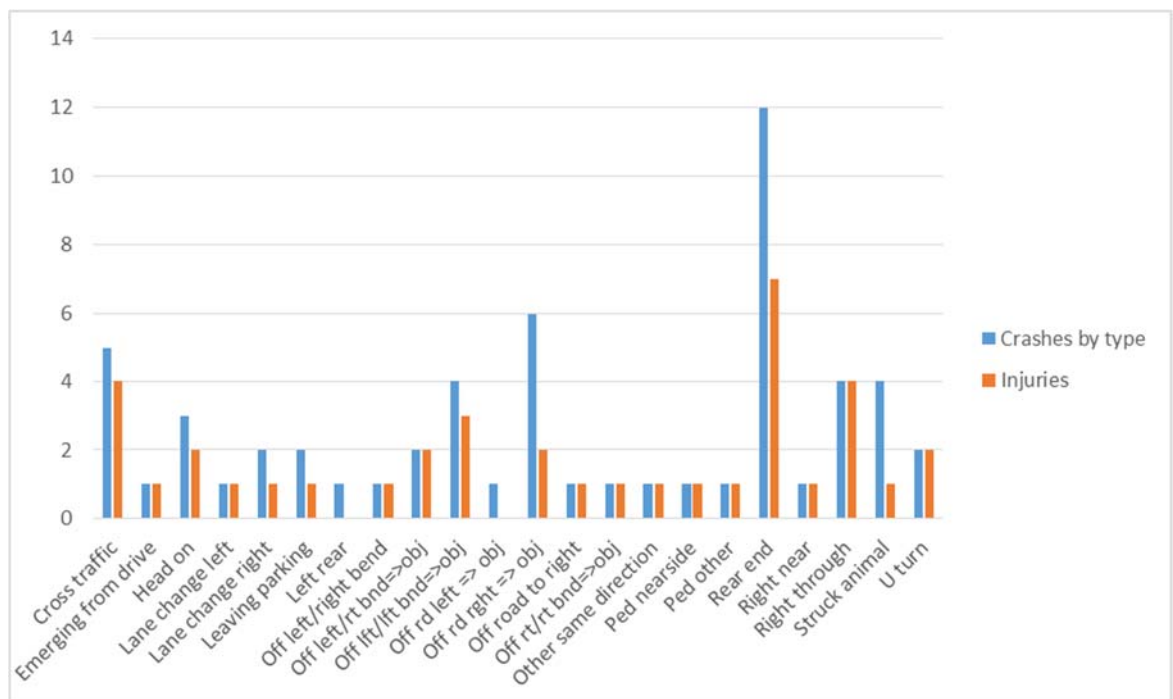
- N – Queue at the North approach to the intersection
- E – Queue at the East approach to the intersection
- S – Queue at the South approach to the intersection
- W – Queue at the West approach to the intersection

3.9 Crash Data

Roads and Maritime provided crash data for a five-year period, between January 2011 and April 2016. There were 57 crashes recorded within this period within the study area.

A summary of the recorded crash types is shown in Figure 3-19. Analysis of the crash data identified that there were approximately 12 crashes, on average, each year.

Figure 3-19 Crashes by type



The main causes of crashes recorded within the study area included:

- 14 crashes involved vehicles leaving the road hitting an object (25 percent);
- 13 crashes involved rear end collisions (23 percent); and
- six cross traffic crashes (11 percent).

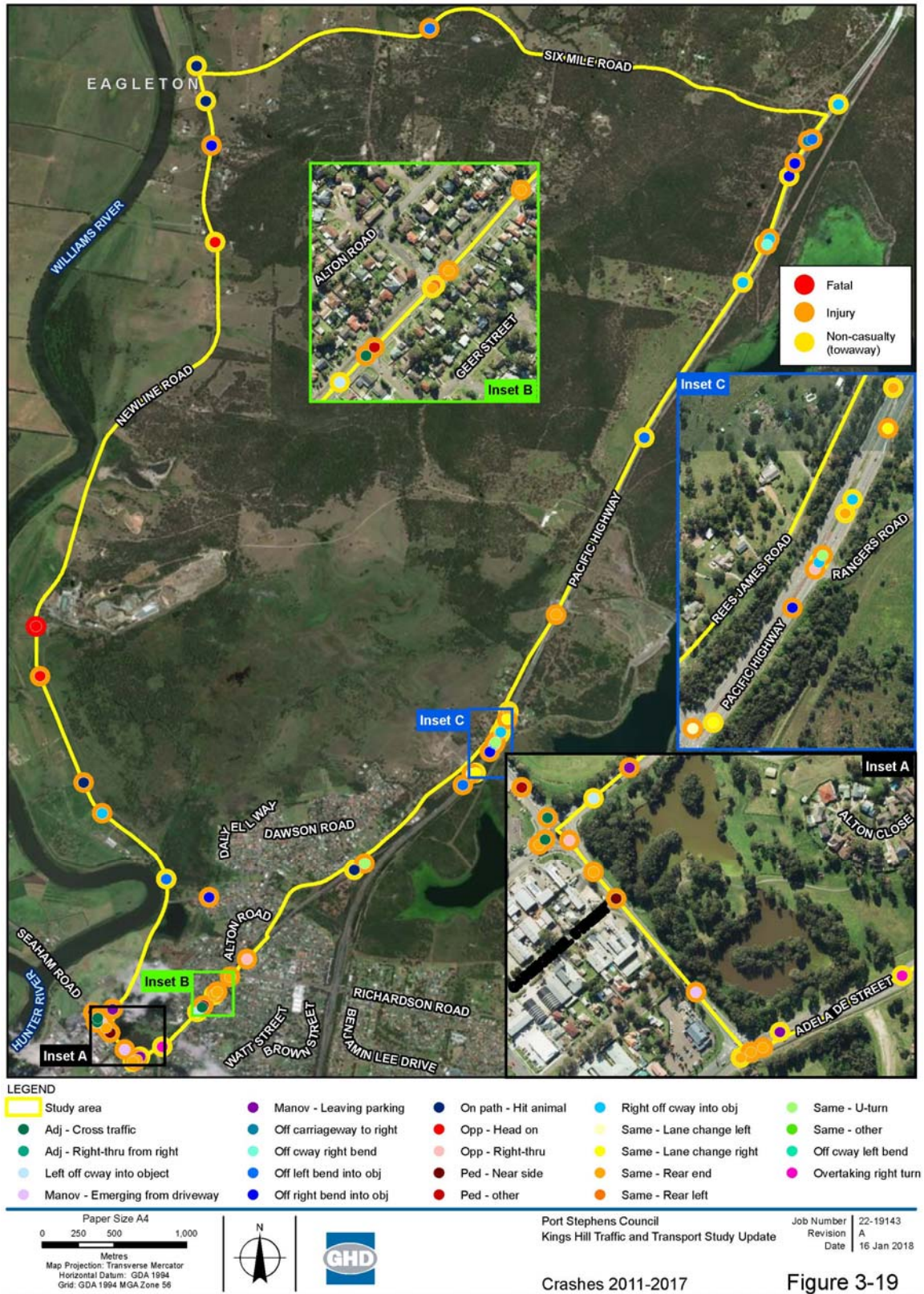
Of these crashes:

- 36 crashes resulted injuries (63 percent);
- 23 percent of the crashes resulted in serious injuries;
- 19 percent of the crashes resulted in a moderate injuries;
- 19 percent of the crashes resulted in minor injuries; and
- 37 percent were non-casualty crashes.

The locations of the crashes are shown in Figure 3-20. The following locations were identified to have crash trends:

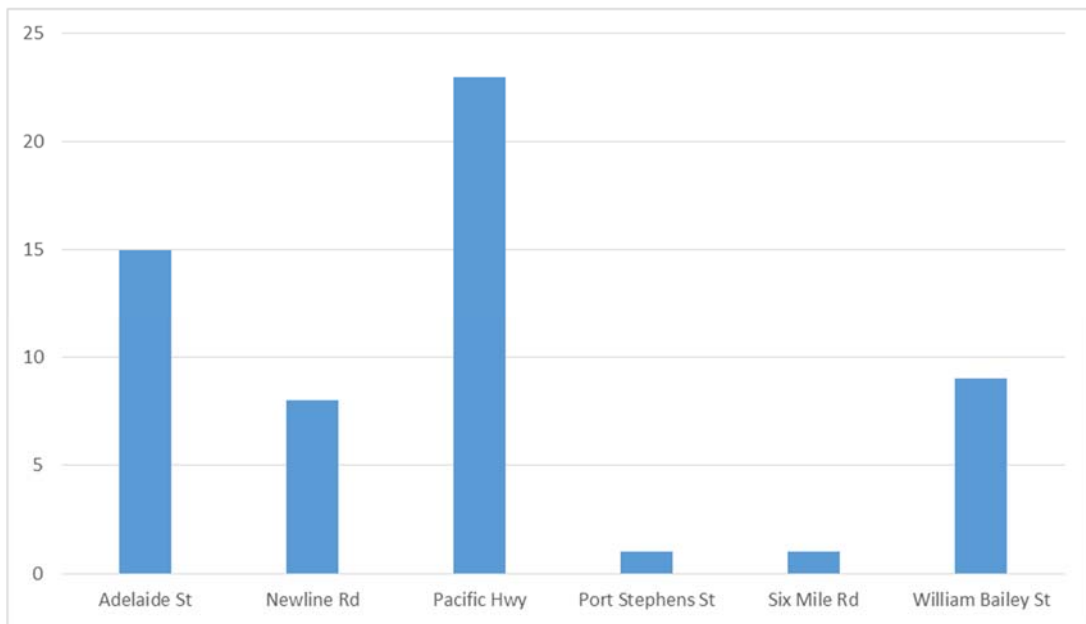
- At the Pacific Highway, near Rangers Road (see Figure 3-20 inset C) there were a number of crashes involving vehicles leaving the road and hitting an object. This could be associated with higher travel speeds and driver error.
- At the Adelaide Street/William Bailey Street intersection (see Figure 3-20 inset A), a high number of rear end crashes were recorded.
- At the William Bailey Street/Newline Road roundabout (see Figure 3-20 inset A), a number of "cross traffic" crashes were recorded.

Figure 3-20 Location of Crashes (2011-2016)



The recorded number of crashes on roads in the study area are summarised in Figure 3-21. The highest number of crashes were recorded on the Pacific Highway (23 crashes).

Figure 3-21 Number of Crashes along Each Road (2011-2016)



4. Committed Developments

This section provides an understanding of planned development and transport network changes, which could affect traffic operations within the study area.

4.1 Planned Growth

4.1.1 Employment

The Port Stephens LGA has a diverse economic base, with the main industries being tourism, defence, manufacturing and agriculture with the RAAF Base and the Tomago Aluminium Smelter being the current largest single employers and Raymond Terrace and Nelson Bay recognised as employment hubs. Other significant employment areas are the Tomago and Heatherbrae industrial business precincts.

4.1.2 Residential

Port Stephens LGA has a population of approximately 69,500 (Census, 2016). Population is concentrated on the Tomaree Peninsula and in the Raymond Terrace area. The Port Stephens Planning Strategy (Port Stephens Council, December 2011) identifies the Kings Hill site as a major new release area with strategic level importance, which is likely to have a population of 11,000 people with 3,810 dwellings at full development.

4.2 Planned Infrastructure Upgrades

PSC have confirmed that Roads and Maritime require a new all movements (full) interchange at the Pacific Highway to serve the Kings Hill site. This is required to be provided following the development of 400 residential lots.

There are currently no other planned changes to roads, public transport or active transport infrastructure near the site.

4.3 Committed Developments in surrounding area

PSC provided details of proposed developments in the area, which could impact traffic operations within the study area road network. These developments are summarised in the following sections.

4.3.1 Martins Creek Quarry

Martins Creek Quarry is located approximately 25 km to the north of Maitland. The quarry is currently operation and it is proposed to expand operations. The proposal is expected to generate 336 truck movement per day.

The traffic impact assessment report indicates that the current hourly movements of 40 trucks inbound and outbound per hour will not increase as part of the expansion. As such, there would be no peak hour increase in traffic associated with the proposal.

4.3.2 Brandy Hill Quarry

Brandy Hill Quarry is located off Clarence Town Road, approximately 3.5 km to the west of Seaham. Access to the quarry is provided via the Brandy Hill Drive / Clarence Town Road intersection.

There is a proposal to extend the approved extraction boundary of the quarry and extract up to 1.5 million tonnes of material per year. The proposal expansion is expected to generate 524 (two-way) truck movement per day, with a maximum of 66 (two-way) truck movements per hour.

The main haulage route is south via Brandy Hill Drive to Seaham Road.

4.3.3 Eagleton Quarry

The proposed Eagleton Quarry site is located on Barleigh Ranch Way, off Italia Road at Eagleton. The development proposal includes the construction and operation of a hard rock quarry, with Access to and from the Pacific Highway/Italia Road intersection.

The proposed quarry is expected to generate 192 vehicle trips per day, with 62 vehicle trips during peak periods.

4.4 Future Background Traffic Growth

In order to assess the impact of the Kings Hill development on the road network it is necessary to formulate traffic growth assumptions for general network traffic, to enable simulation of likely future road network conditions.

The 2017 traffic count data was reviewed against older traffic data, as summarised in Table 4-1. The traffic data indicates that there has been minimal traffic growth along roads within the study area.

Following consultation with PSC and Roads and Maritime, it was agreed to use the previously adopted background traffic growth assumptions (from the previous 2012 Kings Hill Traffic and Transport Study) to calculate background traffic growth. The assumed traffic growth rates adopted to this study are as follows:

- Pacific Highway – 2.9 percent per annum;
- Newline Road – one percent growth per annum; and
- All other roads in the study area – two percent growth per annum.

Table 4-1 Observed Traffic Growth

Location	AM Peak (Veh/h)			PM Peak (Veh/h)			Average Growth Rate
	2012	2017	Growth Rate	2012	2017	Growth Rate	
Pacific Highway (380m west of Tomago Road)	1,336	1,334	0%	1,246	1,400	2%	1%
Newline Road	235	155	-7%	376	277	-5%	-6%
William Bailey Street	1,489	1,565	1%	1,546	1,494	-1%	0%
Adelaide Street	1,308	1,249	-1%	1,231	1,382	2%	1%

PSC identified a number of planned proposed developments within the study area, including the following, as discussed in Section 4.3: It was agreed with PSC that for the purposes of this traffic study, the forecast additional traffic associated with these developments would be accounted for by the application of the background traffic growth rates.

5. Proposed Kings Hill Development

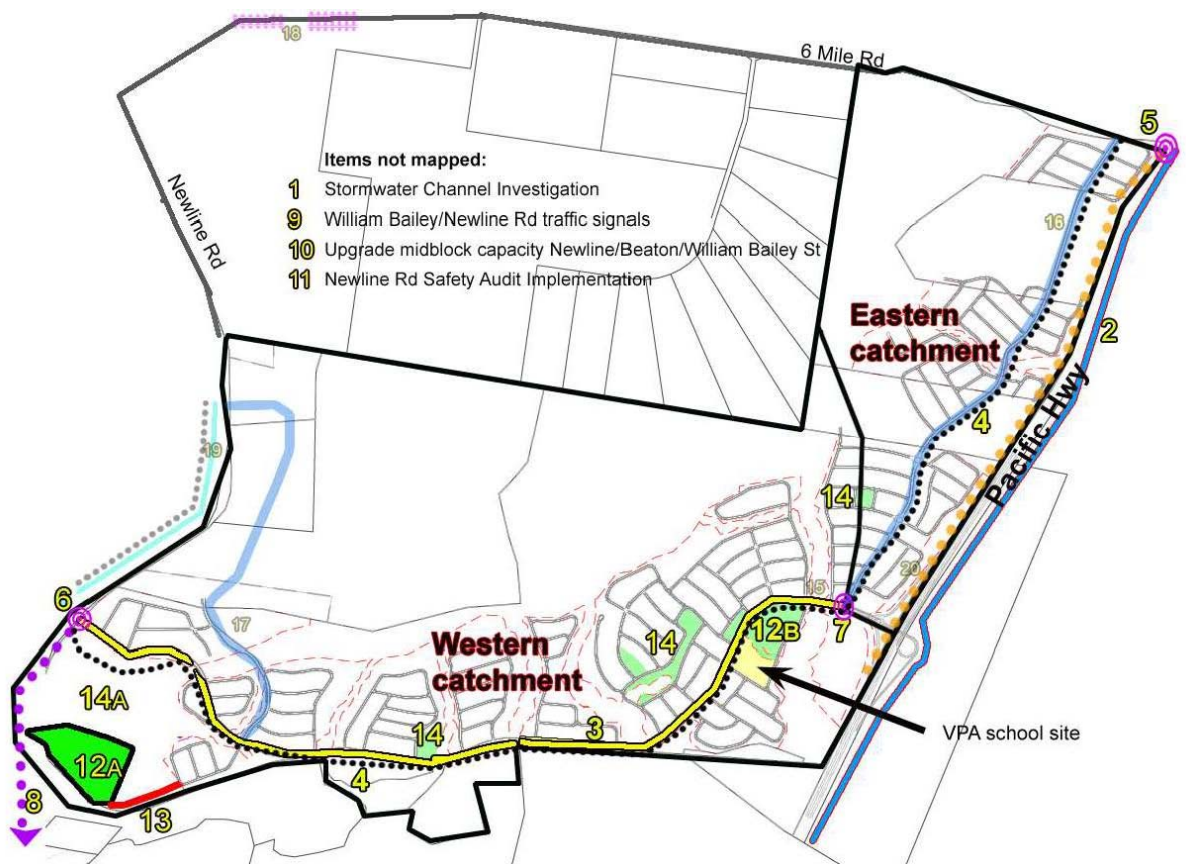
This section provides an understanding of the current Kings Hill masterplan, its residential and commercial precincts and proposed supporting transportation network.

5.1.1 Development Potential

The proposed development would provide 3,810 dwellings on the site. The rezoned Kings Hill site is intended to be developed into a number of residential neighbourhood precincts.

Figure 5-1 shows the proposed infrastructure plan for Kings Hill, provided by KHD (Kings Hill Development). A new town centre is proposed to be provided at the south-eastern part of the site, near the Pacific Highway. It is also expected that the development will include a private school along with some additional local neighbourhood type retail and commercial centres.

Figure 5-1 Kings Hill – Proposed Infrastructure Plan



Source: Kings Hill Development

5.2 Development Staging

The proposed staging of the development, as provided by PSC, is shown in Table 5-1. This development staging is considered to be very conservative for the purposes of estimating the background traffic growth.

It is also unlikely that there will be even growth across the precinct if the major infrastructure for the east and west precinct are not constructed concurrently. However, for the purposes of this traffic study, it has been assumed that there would be even growth from year five onwards at a rate of 1,136 lots every five years.

Table 5-1 Development staging

Assessment Year	Lots (cumulative)	Assumptions
2022	400	Roads and Maritime have advised they will only allow 400 lots to be developed prior to the construction of the Pacific Highway Interchange. This figure assumes the interchange is not completed and any lots over and above 400 are not ready to be released within the next five years.
2027	1,536	Assuming even growth in the precinct of 1,136 lots every five years over 15 years
2032	2,672	
2037	3,810	Assuming that the precinct is fully developed within 20 years.

5.3 Potential Traffic Generation

The traffic generation for the Kings Hill development has been based on the following:

- The updated *Guide to Traffic Generating Developments* (Roads and Maritime, 2013) provides an assumed trip rate for low to medium density residential detached dwelling of 0.85 peak hour trips per dwelling in the morning peak hour and 0.9 trips in the evening peak hour.
- The traffic distribution would be split, with 80 percent out/20 percent in during the AM peak and 80 percent in/20 percent out during the PM peak.
- The *Guide to Traffic Generating Developments (2002)* also provides an assumed trip containment factor of 25 percent to account for education and local service trips, when these services are offered within the site.
- The residential development would be low to medium density at Kings Hill.
- Based on the development profile provided by the stakeholders, it has been assumed that 25 percent of the generated trips would be self-contained within the Kings Hill site by 2032 (following the development of the local centre and school) and would not impact the external road network.

The forecast traffic generation for Kings Hill is shown in Table 5-2.

Table 5-2 Traffic Generation

Horizon Year	No. of Units	AM Trip Generation (vehicles)	PM Trip Generation (vehicles)	AM		PM	
				Arrivals	Departures	Arrivals	Departures
2022	400	340	360	68	272	288	72
2027	1,536	1,306	1,382	261	1,044	1,106	276
2032	2,672	1,703	1,086	341	1,363	869	217
2037	3,810	2,429	1,548	486	1,943	1,239	310

Existing and Future Road Transport Network

The road transport network in relation to the staging of the Kings Hill Development is likely to occur as follows:

1. It is assumed that the surrounding road network will remain unchanged from existing conditions, until the provision of a new site access on Newline Road serving the Kings Hill development and from Six Mile Road to the north (as shown by Figure 5-2).
2. Prior to the construction of the interchange on Pacific Highway in 2022, vehicular access to the Kings Hill would only be from Newline Road or Six Mile Road.
3. As the Kings Hill site is developed, it is proposed that a new all-movements grade separated interchange is provided at Pacific Highway to be constructed in 2022, or after the maximum accumulation of 400 lots within the precinct has been reached (see Figure 5-3):
4. Following the provision of the interchange, the Six Mile Road/Pacific Highway intersection would be converted to a left in/left out only intersection configuration to improve safety and restrict traffic movement between Kings Hill and the Pacific Highway at this location.
5. A new east-west collector road would be provided within the Kings Hill site, linking the proposed town centre and residential local centres with the Pacific Highway to east and Newline Road to the west. In addition, a new north-south collector road will be provided linking the proposed town centre to Six Mile Road (see Figure 5-3).

Figure 5-2 Kings Hill - Future Road Network (prior to 2022)

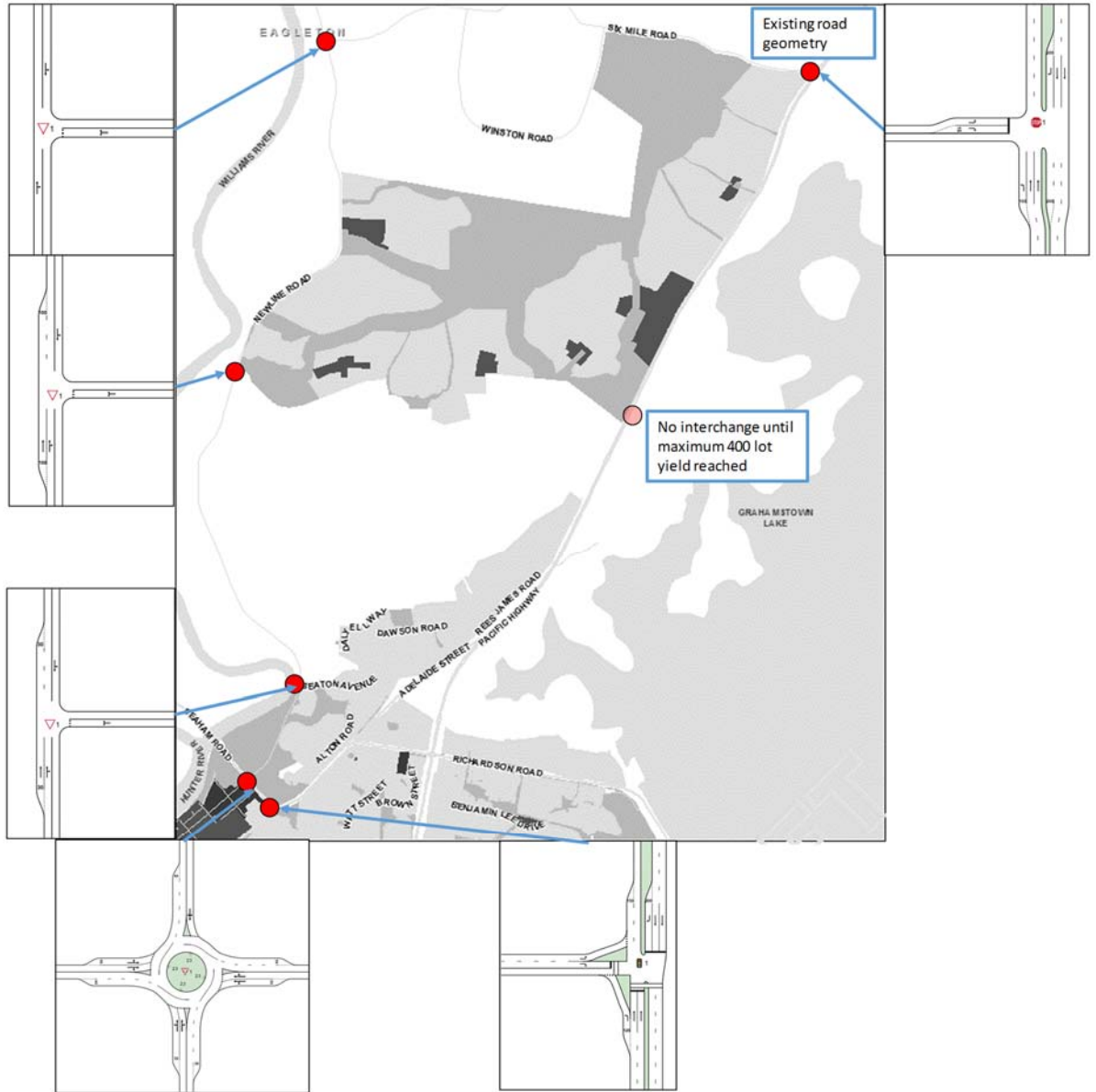
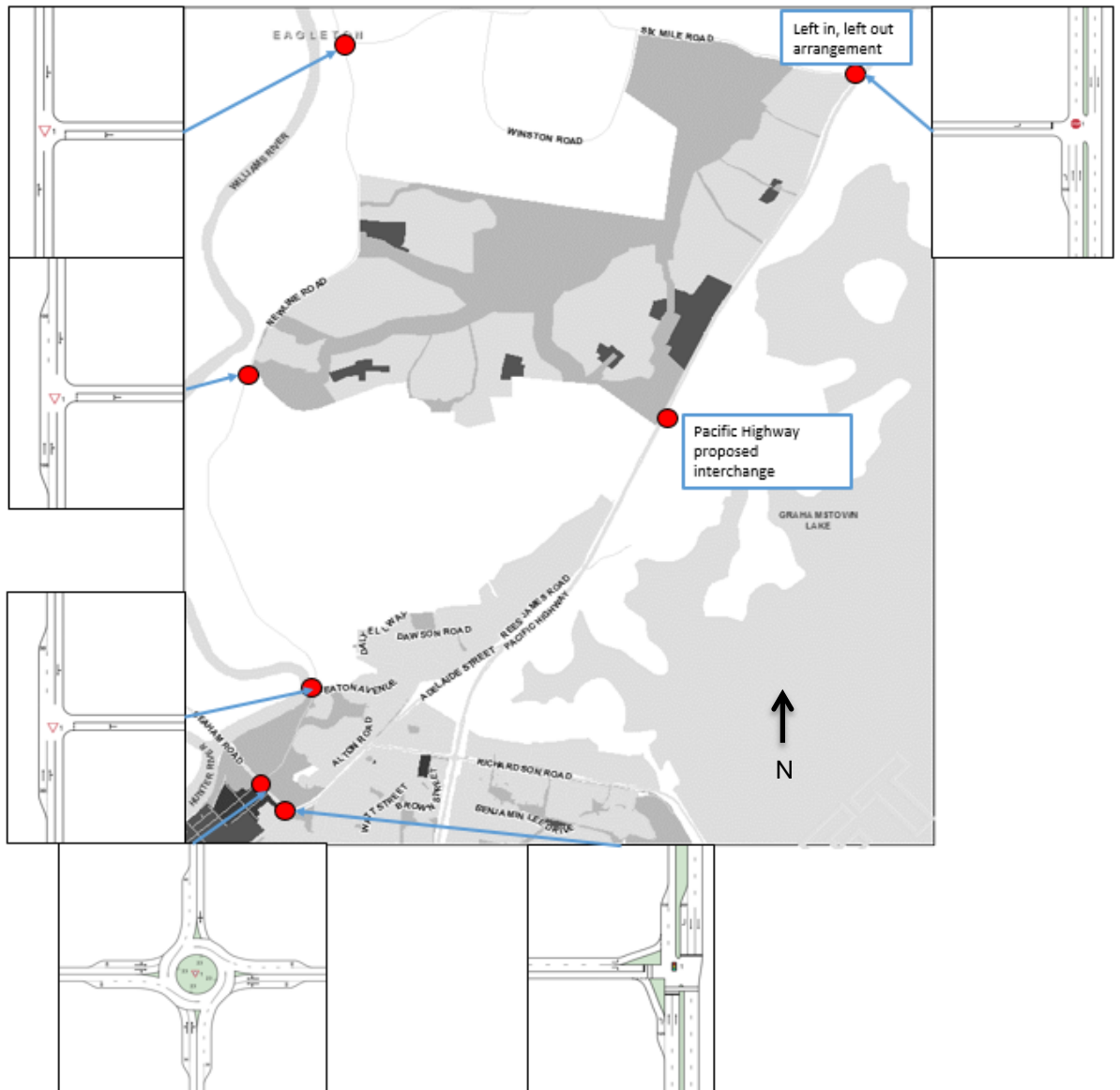


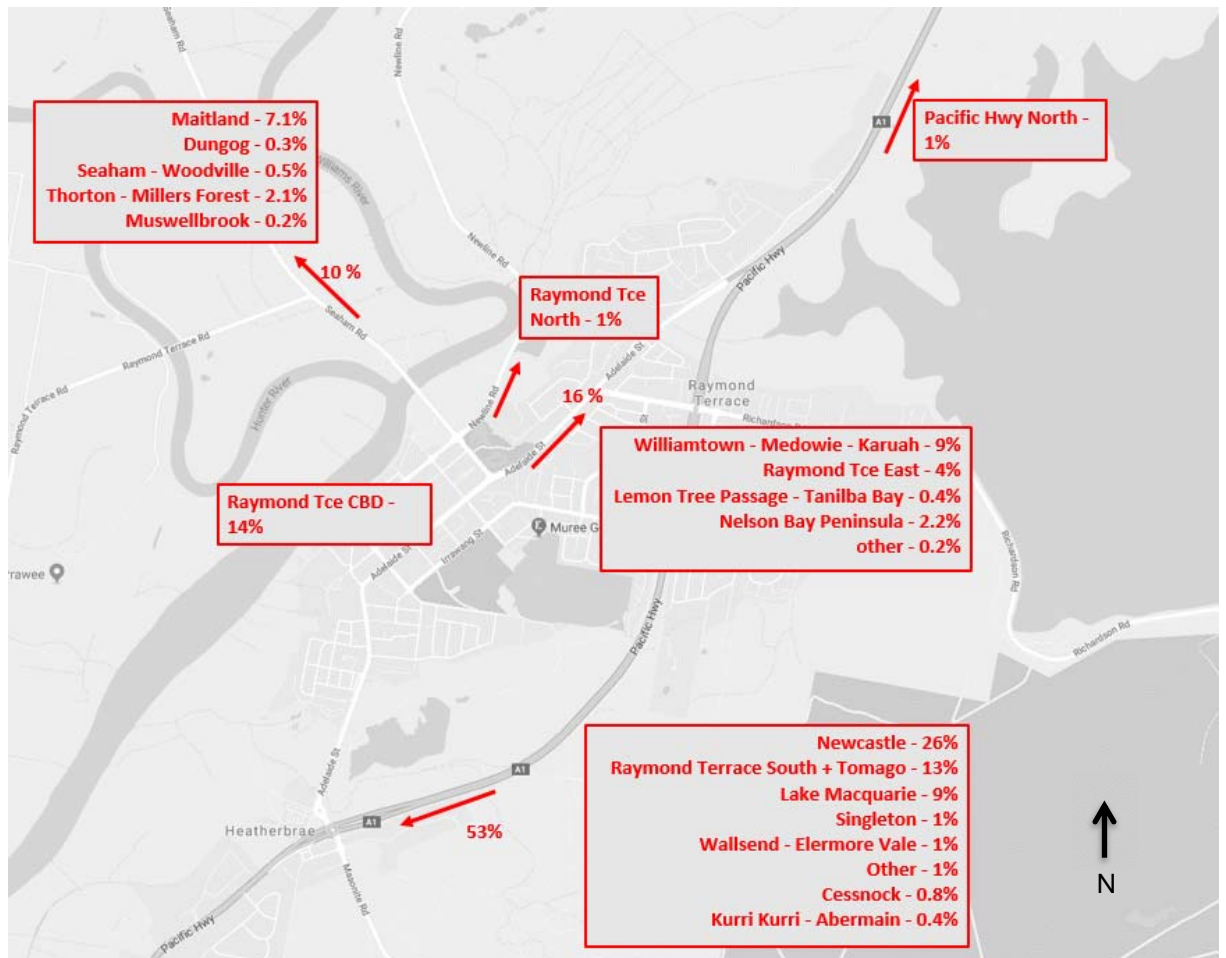
Figure 5-3 Kings Hill - Future Road Network (beyond 2022)



5.4 Trip distribution

The Kings Hill development traffic was distributed onto the surrounding road network based on the Australian Bureau of Statistics (ABS) 2016 Census journey to work statistics for Raymond Terrace, as shown in Figure 5-4. This proposed traffic distribution is in line with current and planned employment growth areas in the Hunter region, including Newcastle, Williamtown RAAF and Maitland.

Figure 5-4 Kings Hill Development Traffic Distribution



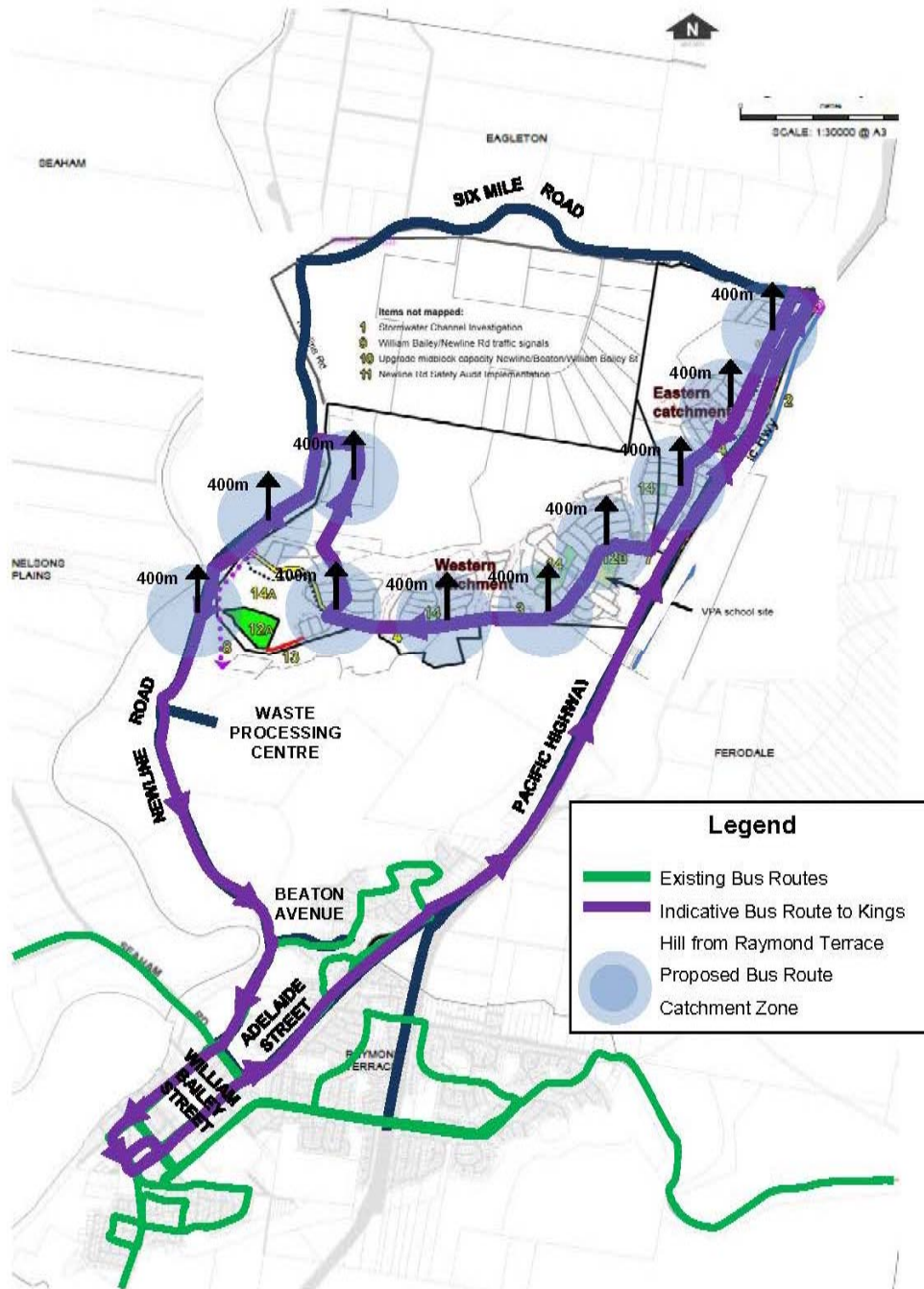
Source: Google Maps (2017), modified by GHD. Traffic distribution based on ABS Census 2016 data

5.5 Public Transport Network Integration

Public transport access to the site is expected to be provided by bus. The size and location of the site is expected to support the extension of local bus services from Raymond Terrace to Kings Hill. In addition, its location adjacent to the Pacific Highway makes it accessible to bus routes connecting Newcastle, Tomago and Raymond Terrace.

An indicative bus route that could potentially serve the Kings Hill site is shown in Figure 5-5, along existing bus routes operating to near the site (shown in green). Figure 5-5 also shows 400 m walking catchment areas from indicative bus stop locations, which shows that the majority of residential precincts can be situated within the bus catchment.

Figure 5-5 Indicative Bus Route for Kings Hill



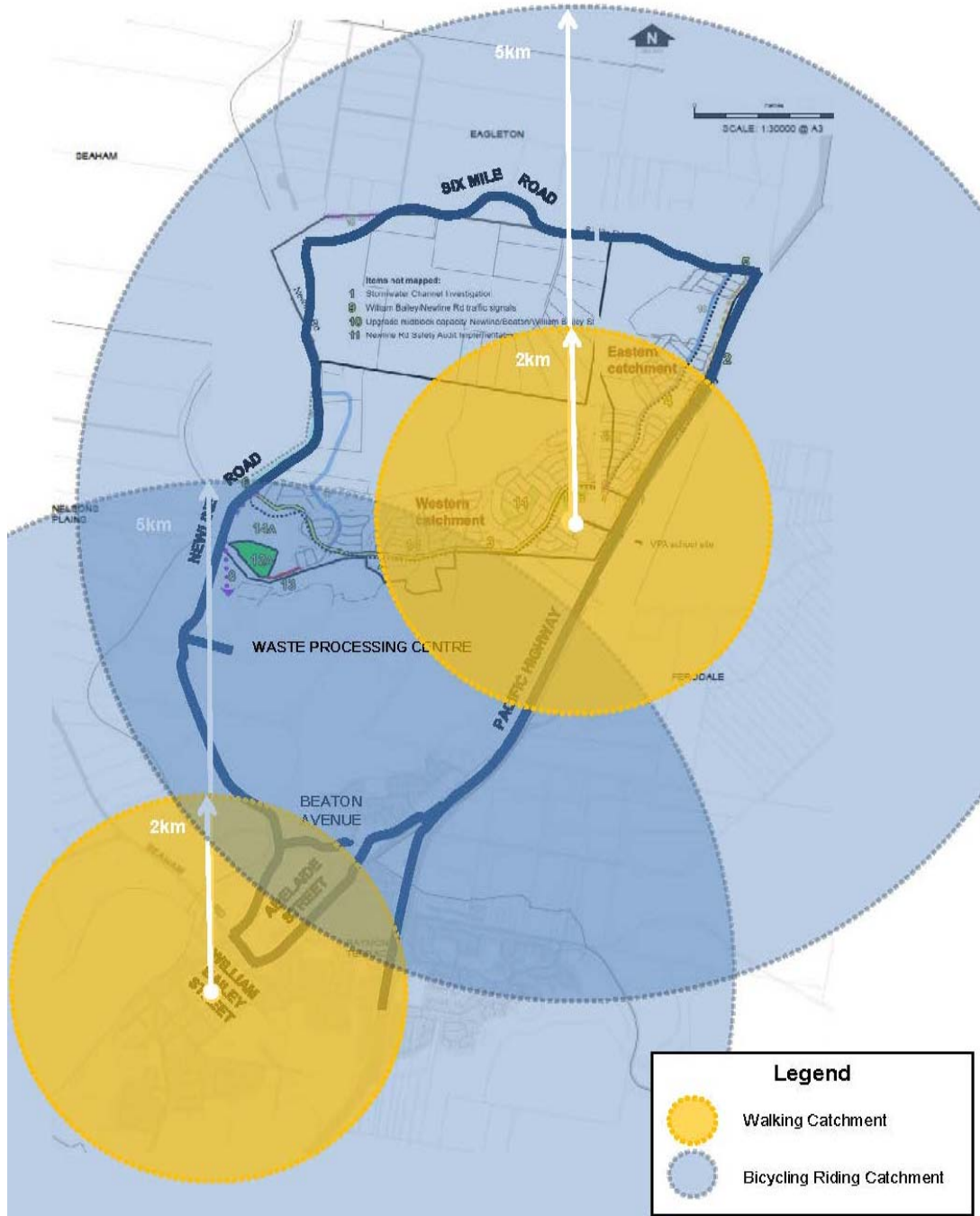
5.6 Active Transport Network Integration

Transport for NSW's documents *Sydney's Walking Future* and *Sydney's Cycling Future* identifies 5 km bicycle riding catchment and 2 km walking catchment around major activity centres. Figure 5-6 shows walking and bicycling riding catchments from Raymond Terrace Town Centre and the proposed commercial core within Kings Hill.

This shows the Kings Hill site is outside of the 2 km walking catchment of Raymond Terrace Town Centre. However, the southern section of the Kings Hill lies within the 5 km cycle catchment of Raymond Terrace and the majority of the site is within 5 to 7 km of the Town Centre.

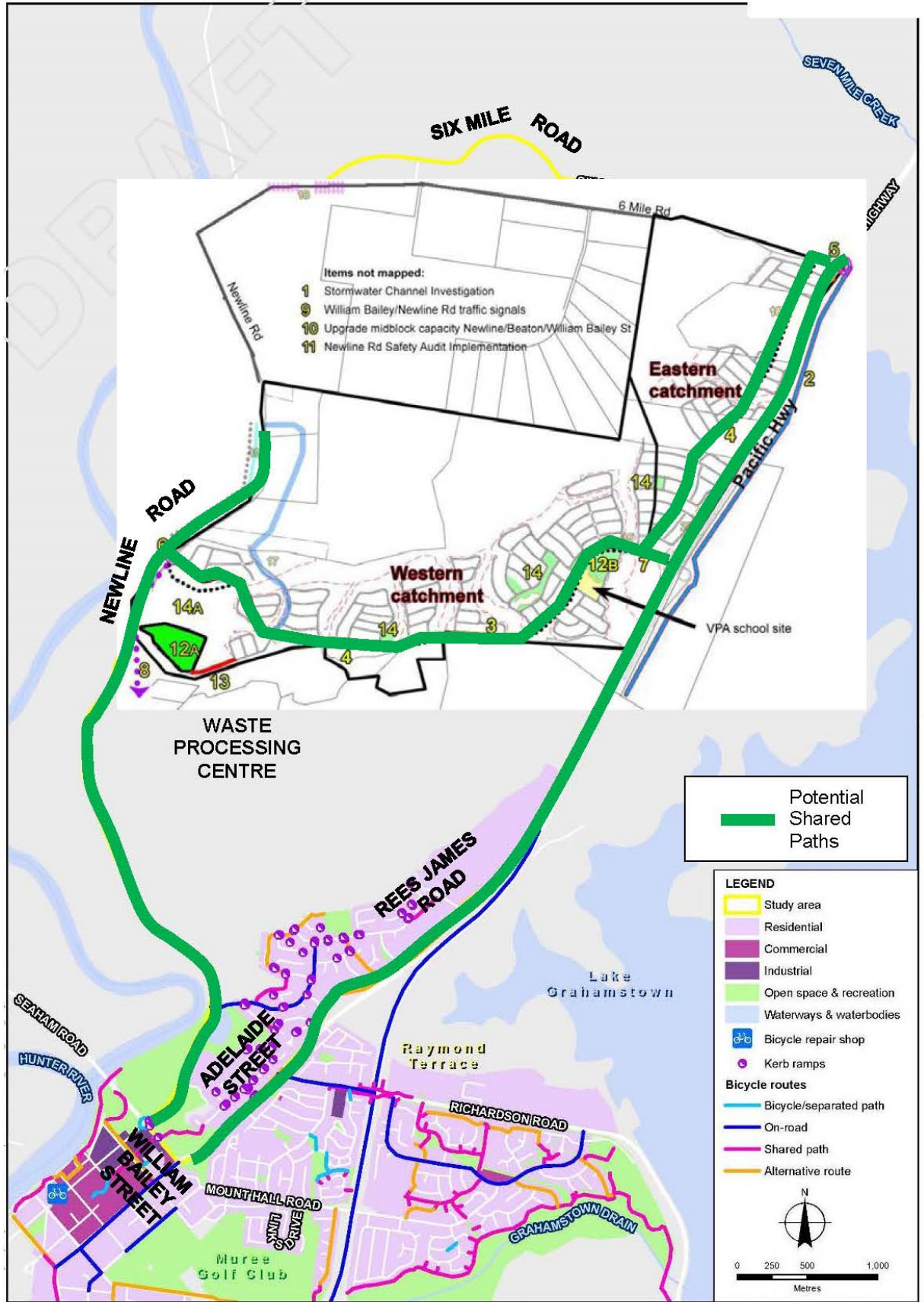
As such, bicycle riding is considered a feasible transport mode for residents traveling to Raymond Terrace. However, the lack of dedicated infrastructure and street lighting between the site and Raymond Terrace may act as a deterrent.

Figure 5-6 2 km Pedestrian and 5 km Cycling Catchment Plan



Bicycle riding connections to and from Kings Hill should include a shared path either along Newline Road, the Pacific Highway or Rees James Drive. Local bicycle riding facilities within Kings Hill should also be provided either through the provision of mixed traffic routes on local roads, with bicycle lanes or shared paths provided on higher order roads (collector roads). The indicative shared path routes are shown at Figure 5-7.

Figure 5-7 Indicative Shared Path Connections



Data source: Aerial imagery - SIXmaps 2018 ESRI 2018; General topo - NSW LPI DTDB 2015 & 2012; Zoning - SILEP LZN 2017; Bus data - GTFS & Port Stephens Council. Created by jprice

6. Traffic Impact Assessment

This section identifies the likely future traffic scenarios for the road network surrounding Kings Hill. The reporting of infrastructure needs is based on an assessment of network performance and has been undertaken based on the following methods:

- SIDRA 7 Intersection traffic modelling software to assess the network's ability to accommodate traffic growth at intersections; and
- Spreadsheet LoS assessments of midblock performance based on with or without Kings Hill site development traffic.

The ability of the site to achieve a sustainable transport outcome is also critical to the provision of infrastructure within and external to the site and the overall liveability value of Port Stephens LGA. This aspect has also been reviewed as part of the appraisal process.

6.1 Method

The method applied to this assessment is described in the following section.

6.1.1 Spreadsheet Traffic Model

In order to determine future traffic turning movements at intersections within the study area under post-development traffic conditions, a spreadsheet traffic model has been developed. This spreadsheet model has been developed to forecast future traffic conditions during weekday AM and PM peak hour periods.

The spreadsheet model is based on the 2017 traffic surveys. Traffic growth (as detailed in Section 4.4) was then applied to the 2017 surveyed traffic flows to calculate future traffic conditions for selected horizon year traffic flow periods. The forecast traffic associated for Kings Hill was then distributed onto the study network and added to the future year without development traffic flows to calculate the future horizon year 'with development' traffic scenarios.

6.1.2 Assessment Criteria

Analysis of the impact of the proposed development on the study network is based on midblock and intersection capacity analysis. This approach has also been used to determine proposed infrastructure upgrades to accommodate the increase in traffic associated with background traffic growth and the proposed Kings Hill development.

6.1.3 Staging Plan Methodology

The expected staging of the Kings Hill site, as provided by PSC, is discussed in Section 5.2.

The staging of Kings Hill will relate to the trigger points for transport network improvements, identified from the performance of the network with and without Kings Hill. This will be used to inform discussions between PSC, Roads and Maritime and the Landholders. The development staging and trigger points will assist the drafting of a Section 94 Plan for the provision of any required infrastructure upgrades.

In order to identify the development related trigger points for infrastructure upgrades, a number of development scenarios have been appraised. This approach involves a staged assessment of the development proposals at five-year horizon year intervals including in 2017, 2022, 2027, 2032 and 2037.

The without development analysis for each horizon year (2017, 2022, 2027, 2032 and 2037) has been undertaken to identify any infrastructure upgrades required to support background traffic growth without the development of Kings Hill.

6.2 Future Midblock Performance

A review of midblock performance has been undertaken for the worst direction during the peak periods for the roads expected to be most affected by the Kings Hill development. The midblock performance has been assessed for each of the following scenarios at five-year intervals between 2017 and 2037:

- A – Existing road network with background traffic growth;
- B – Kings Hill development traffic and background traffic growth without the proposed Pacific Highway interchange; and
- C – Kings Hill development traffic and background traffic with the proposed Pacific Highway interchange.

Scenario A - Existing road network with background traffic growth

Table 6-1 provides a summary of midblock performance during each peak period for the base network plus background traffic growth with no Kings Hill development.

Table 6-1 LOS existing road network with background traffic growth

Road	Capacity (veh/h)	2017 (Base)		2022		2027		2032		2037	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Newline Road	-	B	C	B	C	B	C	C	C	C	C
William Bailey Street	900	D	E	E	F	F	F	F	F	F	F
Adelaide Street	900	E	F	F	F	F	F	F	F	F	F
Seaham Road	900	D	F	E	F	F	F	F	F	F	F
Port Stephens Street	900	D	D	D	E	E	F	E	F	F	F
Pacific Highway	3,770	A	A	A	A	A	A	A	A	A	A
Six Mile Road	790	A	A	A	A	A	A	A	A	A	A

The midblock capacity assessment indicates that a number of roads within the study area are expected to operate at, or over, the theoretical midblock capacity in future years. The results of the midblock performance highlights the following:

- Pacific Highway, Newline Road and Six Mile Road are likely to operate at a satisfactory LoS until 2037;
- Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily LoS;
- Port Stephens Street is expected to operate at an unsatisfactory LoS from 2022.

B - With Kings Hill Development (without Pacific Highway interchange)

Table 6-2 provides a summary of the worst directional midblock performance during each peak under the existing road network configuration with Kings Hill development traffic during the future horizon years.

Table 6-2 Kings Hill Development without the interchange

Road	Capacity (veh/h)	2017 (Base)		2022		2027		2032		2037	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Newline Road (two way)	-	B	C	C	D	E	E	E	E	F	F
William Bailey Street	900	D	E	E	F	F	F	F	F	F	F
Adelaide Street	900	E	F	F	F	F	F	F	F	F	F
Seaham Road	900	D	F	E	F	F	F	F	F	F	F
Port Stephens Street	900	D	D	D	E	F	F	F	F	F	F
Pacific Highway	3,770	A	A	A	A	A	A	A	A	A	A
Six Mile Road (two way)	790	A	A	A	A	A	A	A	A	A	A
Kings Hill Development Road (west)	900	-	-	A	A	F	F	F	F	F	F

The midblock capacity assessment indicates the following:

- Pacific Highway and Six Mile Road are likely to operate at a satisfactory LoS until 2037;
- Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily LoS;
- Newline Road and Port Stephens Street are expected to operate at an unsatisfactory LoS by 2027
- The western section of the proposed Kings Hill east-west collector road is expected to operate at LoS F by 2027 as a two-way two-lane road. However, the proposed interchange is expected be constructed by this time (Roads and Maritime requires this interchange to be provided following the development of 400 lots at Kings Hill).

C - Kings Hill development and background traffic with full interchange

Table 6-3 provides a summary of the worst directional midblock performance during each peak under the Pacific Highway interchange upgrade with Kings Hill development traffic and background traffic growth.

Table 6-3 Kings Hill Development with the interchange

Road	Capacity (veh/h)	Base		2022		2027		2032		2037	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Newline Road	-	B	C	C	C	C	D	D	D	D	D
William Bailey Street	900	D	E	E	F	F	F	F	F	F	F
Adelaide Street	900	E	F	F	F	F	F	F	F	F	F
Seaham Road	900	D	F	E	F	F	F	F	F	F	F
Port Stephens Street	900	D	C	D	E	F	F	F	F	F	F
Pacific Highway	3,770	A	A	A	A	B	B	B	C	C	C
Six Mile Road	790	A	A	A	A	A	A	A	A	A	A
Kings Hill Development Road (east)	900	-	-	A	A	D	E	F	F	F	F
Kings Hill Development Road (west)	900	D	D	A	A	A	A	B	B	C	C

The midblock capacity assessment as shown in Table 6-3 indicates the following:

- Pacific Highway, Newline Road and Six Mile Road are likely to operate at a satisfactory LoS until 2037;
- Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily LoS;
- The eastern section of the proposed Kings Hill east-west collector road would likely operate at an unsatisfactory LoS by 2027 as a two-way two-lane road (one lane in each direction). Two traffic lanes each way would be required to improve mid-block performance at this location.
- The western section of the proposed Kings Hill east-west collector road would operate satisfactorily in to 2037, as a two-way two-lane road (one traffic lane in each direction).

6.3 Future Intersection Performance

The operational performance of all intersections impacted by Kings Hill has been assessed using SIDRA 7 Intersection analysis software tool for each of the following scenarios:

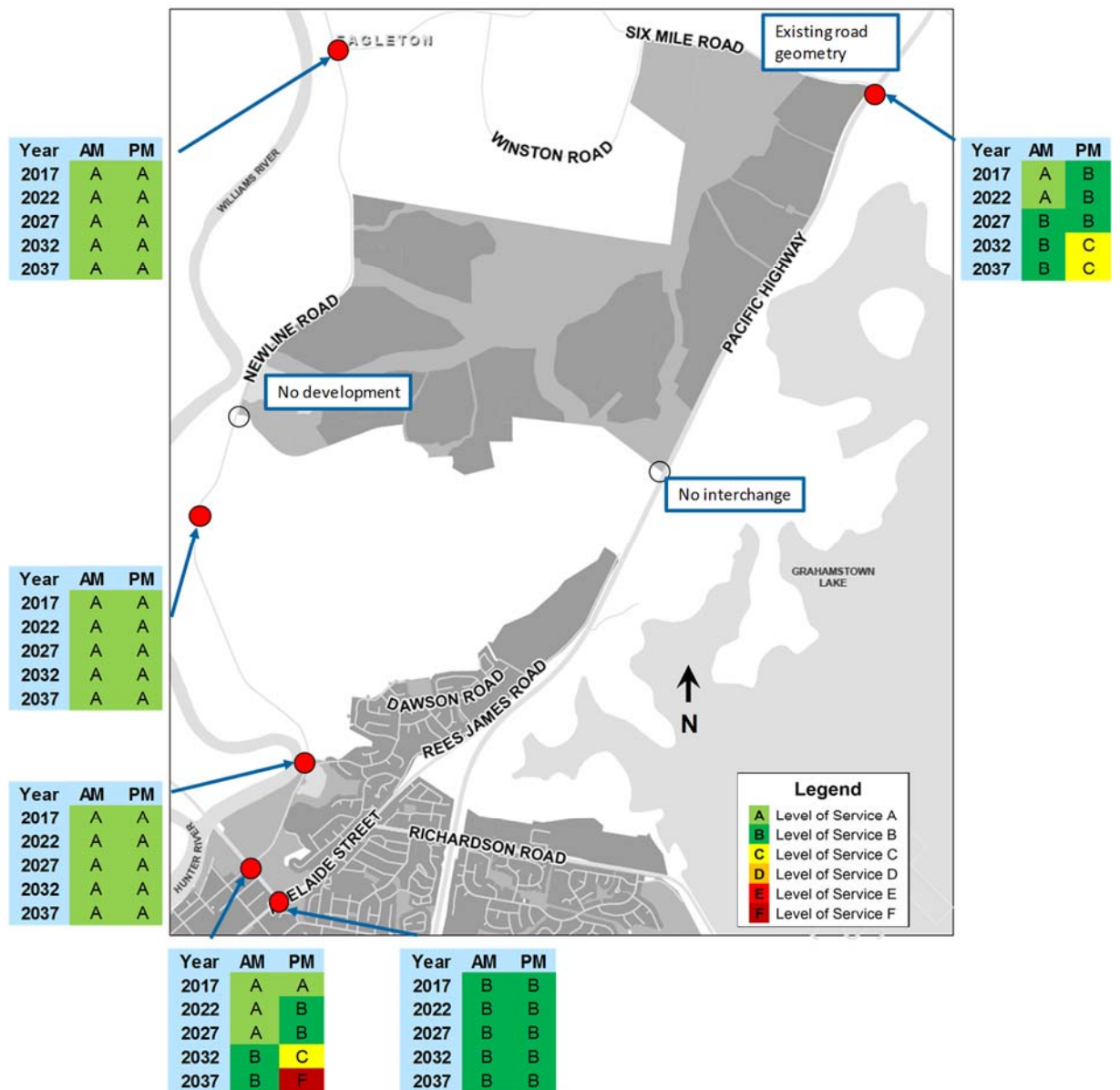
- A – Existing road network with background traffic growth
- B – Kings Hill development traffic and background traffic growth without the interchange;
- C – Kings Hill development traffic and background traffic with the full interchange

Refer to Appendix B for detailed on SIDRA results.

6.3.1 Scenario A – Existing road network and background traffic growth

A summary of the SIDRA modelling results for the Scenario A (existing road network with background traffic growth) is shown in Figure 6-1.

Figure 6-1 Scenario A LOS Summary



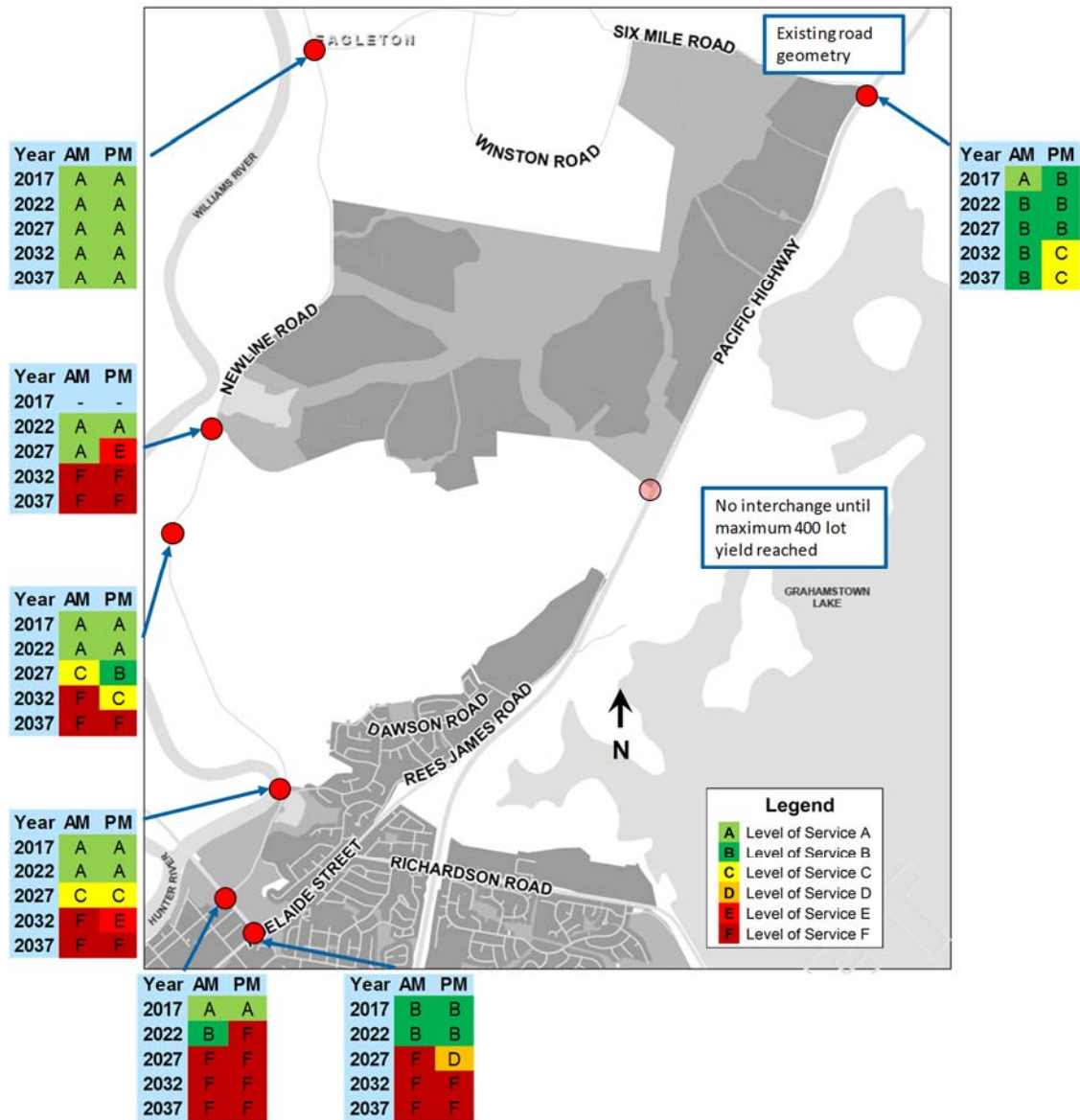
The SIDRA intersection modelling results, under Scenario A, indicates the following:

- The Newline Road/Seaham Road/William Bailey Street roundabout is expected to operate at LoS F in the PM peak by 2037.
- All other intersections are expected to operate with a satisfactory LoS in 2037.

6.3.2 Scenario B - Development traffic without the Pacific Highway Interchange

A summary of the SIDRA performance measures for the Kings Hill Development, without the proposed Pacific Highway interchange, is shown in Figure 6-2.

Figure 6-2 Scenario B – LOS Summary



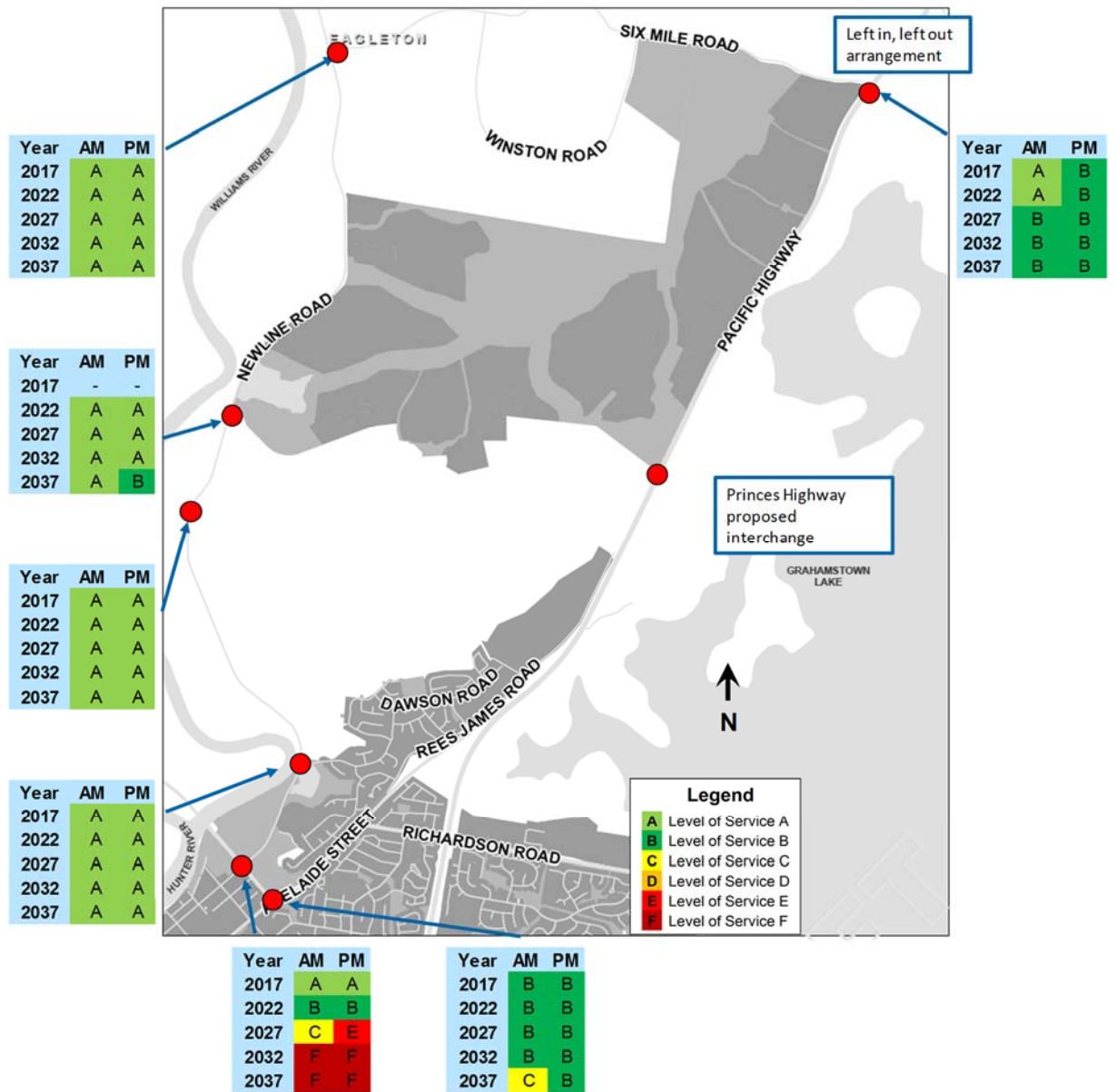
The SIDRA modelling results for Scenario B indicates the following:

- The Newline Road/William Bailey Street roundabout is expected to operate at LoS F by 2022:
- The Adelaide Street/William Bailey Street intersection is expected to operate at LoS F by 2027:
- The Newline Road/Kings Hill access is expected to operate at an unsatisfactory LoS E (as a priority T-intersection) by 2022:
- The following intersections would operate at an unsatisfactory LoS F by 2032:
 - Newline Road/Beaton Avenue
 - Newline Road/Waste Management Centre access

6.3.3 Scenario C – Development traffic with Pacific Highway Interchange

A summary of the SIDRA modelling results for Scenario C is shown in Figure 6-3.

Figure 6-3 Scenario C - LOS Summary



The SIDRA results, under Scenario C, indicate the following:

- The Newline Road/William Bailey Street roundabout is expected to operate at an unsatisfactory LoS E (PM peak only) by 2027 and at LoS F in 2032 (AM and PM peak);
- All other intersections are expected to operate at a satisfactory LoS C or better by 2037.
- The proposed left-in/left-out arrangement at the Pacific Highway/Six Mile Road intersection is expected to improve the intersection performance, as right turning vehicles would be forced to use the proposed Pacific Highway interchange

The SIDRA modelling indicates that the proposed Pacific Highway interchange would significantly reduce traffic congestion compared to the no-interchange scenario (Scenario B). However, the SIDRA modelling indicates that an improvement to the Newline Road/William Bailey Street would be required by 2027.

6.3.4 Intersection Upgrade

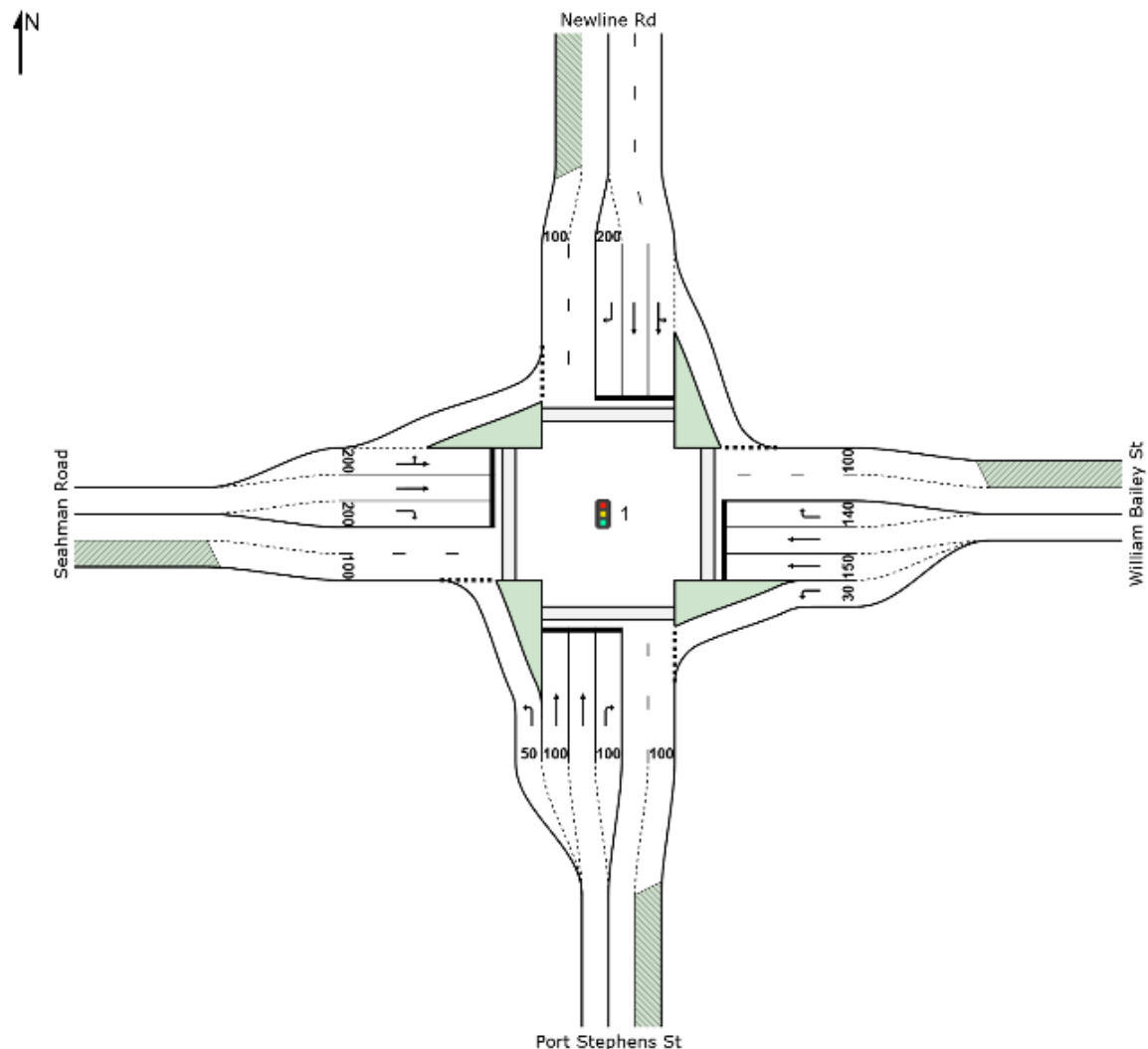
Additional SIDRA intersection modelling has been undertaken for the William Bailey Street/Newline Road/Seaham Road/Port Stephens Street intersection to determine required mitigation measures, as this intersection is likely to perform unsatisfactorily by 2027 with the Kings Hill Development. It should be noted that the intersection would also need to be upgraded without the Kings Hill development by 2037, to accommodate forecast background traffic growth.

This assessment indicates that the following improvements would be required:

- Replacing the roundabout with a traffic signal controlled intersection; and
- Widening approaches to include left hand turn slip lanes and dedicated right hand turn lanes at each approach.

The proposed intersection layout is shown in Figure 6-4.

Figure 6-4 Proposed William Bailey Street/Newline Road Intersection Layout



Source: Sidra 7

A summary of the SIDRA modelling results for the proposed William Bailey Street/Newline Road upgraded (signal controlled intersection) is shown in Table 6-4.

The proposed intersection arrangement is expected to operate with a satisfactory LoS C and LoS D during the weekday AM and PM peak periods respectively in 2037. The 95th percentile

queue length along the William Bailey Street approach is expected to extend back to the intersection with Adelaide Street (assuming one full approach lane only). However, it is noted that the midblock capacity assessment indicates that two lanes in each direction may be needed along William Bailey Street, which would reduce the expected queue length.

Table 6-4 SIDRA Results - Proposed William Bailey Street/Newline Road Intersection Layout

Traffic Scenario	AM Peak				PM Peak			
	Average Delay (s)	LoS	Degree of Saturation	95% Queue (m)	Average Delay (s)	LoS	Degree of Saturation	95% Queue (m)
2037 with Kings Hill development	42	C	0.880	261 (East)	56	D	0.997	500 (East)

6.4 Summary of Intersection Upgrade Trigger Points

Table 6-5 and Table 6-6 provide a summary of scenario A and D trigger points for the required provision of network infrastructure upgrades. This analysis is based on the SIDRA intersection capacity analysis.

Table 6-5 Scenario A - Background Traffic Growth Trigger Points (no Kings Hill Development)

Horizon Year (Trigger Point)	Required Infrastructure Upgrades
2017	Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily midblock LoS.
2023	No additional infrastructure requirements.
2027	No additional infrastructure requirements.
2032	Implementation of capacity enhancements for Newline Road due to LoS E conditions
2037	William Bailey Street/Newline Road/Port Stephens Street intersection operates over capacity. Intersection upgrade required.

Table 6-6 Scenario C - Kings Hill Development Trigger Points

Horizon Year	No. of Lots (Trigger Point)	Required Infrastructure Upgrades
2017	0	<ul style="list-style-type: none"> Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily midblock LoS.
2022	400	<ul style="list-style-type: none"> Proposed Pacific Highway interchange to be provided, as required by Roads and Maritime following the development of 400 residential lots at Kings Hill. Modify the Six Mile Road/Pacific Highway intersection to allow the left-in, left-out movements only. Kings Hill east-west collector road to be provided with a single traffic lane in each direction (at both the western and eastern ends of this road).

Horizon Year	No. of Lots (Trigger Point)	Required Infrastructure Upgrades
		<ul style="list-style-type: none"> Adelaide Street, William Bailey Street, Seaham Road and Port Stephens Street are expected to operate at an unsatisfactorily midblock LoS, with the proposed Pacific Highway interchange.
2027	1,536	<ul style="list-style-type: none"> Two traffic lanes in each direction required for the eastern section of the Kings Hill east-west collector road. Implementation of capacity enhancements for Newline Road due to LoS E conditions William Bailey Street/Newline Road/Port Stephens Street intersection operates over capacity. Intersection upgrade required.
2032	2,672	<ul style="list-style-type: none"> Two traffic lanes in each direction along the eastern section of the proposed Kings Hill east-west collector road.
2037	3,810	<ul style="list-style-type: none"> No additional infrastructure requirements.

6.4.1 Impact of Changes to Six Mile Road/Pacific Highway Intersection

Following the implementation of the proposed Pacific Highway interchange and opening of a Kings Hill access road connection to Six Mile Road, it is planned to modify the Six Mile Road/Pacific Highway intersection to allow the left-in, left-out movements only. This arrangement would prevent access between the Pacific Highway southbound carriageway and Six Mile Road. Access between the Pacific Highway southbound carriageway will be via the Pacific Highway/Kings Hill interchange and the new Six Mile Road/Kings Hill road connection in Kings Hill.

This arrangement would result in the following:

- Additional travel distance of approximately 4km for vehicles travelling southbound on the Pacific Highway in order to access Six Mile Road; and
- A minor increase in travel distance (through the Kings Hill site) for vehicles travelling from Six Mile Road to the Pacific Highway southbound carriageway.

6.5 Sustainable Transport Appraisal

The following assessment evaluates the proposed masterplan for Kings Hill and its ability to achieve sustainable transport design goals. Its focus is on the following:

- On-site trip containment for a variety of trip purposes,
- Encouraging walking and bicycle riding for short trips, and
- Encouraging travel by public transport.

The appraisal has been undertaken with reference to the policy objectives and design principals set out in Section 2.

Table 6-7 Sustainable Transport Checklist for Kings Hill

No	Question	Yes	No	Comments
1	Offers opportunity to provide attractive sustainable transport opportunities and choices over the long term?	✓		Its ability will be limited by the attractiveness of the public bus service provision and travel distances to regional activity centres and employment hubs
2	Can offer trip containment and follows benchmarks for changes in travel behaviour?	✓		Mode choice for external trips will be dependent on regional planning initiatives.
3	Can offer trip containment without proposed transport initiatives?	✓		Its ability to achieve this goal is dependent on the timing for the delivery of the town centre, school, local shops and other community services.
4	Does the site encourage counter peak flow traffic generation to better optimise under-utilised assets?		✗	No, but does encourage travel along some under-utilised assets (Newline Road) and the site has the potential to change land use to encourage counter peak flow traffic.
5	Is it possible for the proposed land use mix to serve other local and regional needs?		✗	Not under the current proposal
6	Does the site plan align with transit oriented development principles, by offering efficient and effective operations and an internal network structure that is able to serve the majority of the development through one bus route?	✓		The road network and the location of the town centre is not the most effective design and can be improved.
7	Can travel within the site be achieved through an easy and safe bike ride?	✓		Issues with terrain and directness of bicycle routes from all site areas to schools and the town centre, and the likely local road environment are not clear in the documentation and will need to be clarified.
8	Is Kings Hill planned to encourage walking and are most trips walkable?		✗	The location of the town centre is an issue in relation to the overall site and may discourage walking (over 2km) from western and northern areas of the site. The location of the school is also currently unknown
9	Is network connectivity achieved and can the network structure offer protection for users and discourage unnecessary speeds through urban areas?	✓		The west-east collector road is located to the south of most residential development areas and serves most local streets. It is desirable to offer connectivity to the town centre via

No	Question	Yes	No	Comments
				residential areas and the local street network.
10	Does the street network consider place and movement function as guided in the NSW Road Planning Framework?		*	The “movement and place” functionality assessment of key links within the Kings Hill site should be undertaken as part of further assessments of the precincts.

The assessment indicates that the development of the site under the current masterplan proposals can achieve a desirable sustainable transport outcome for managing growth in the region. However, the proposed location of certain key land uses, especially the current configuration of the town centre and its committed mix and intensity would improve the outcome. This can be complimented by better understanding the attractiveness of proposed active transport connections and reviewing road network structure options to allow it to better align with bus network service needs.

6.6 Emergency Planning - Flood Route Assessment

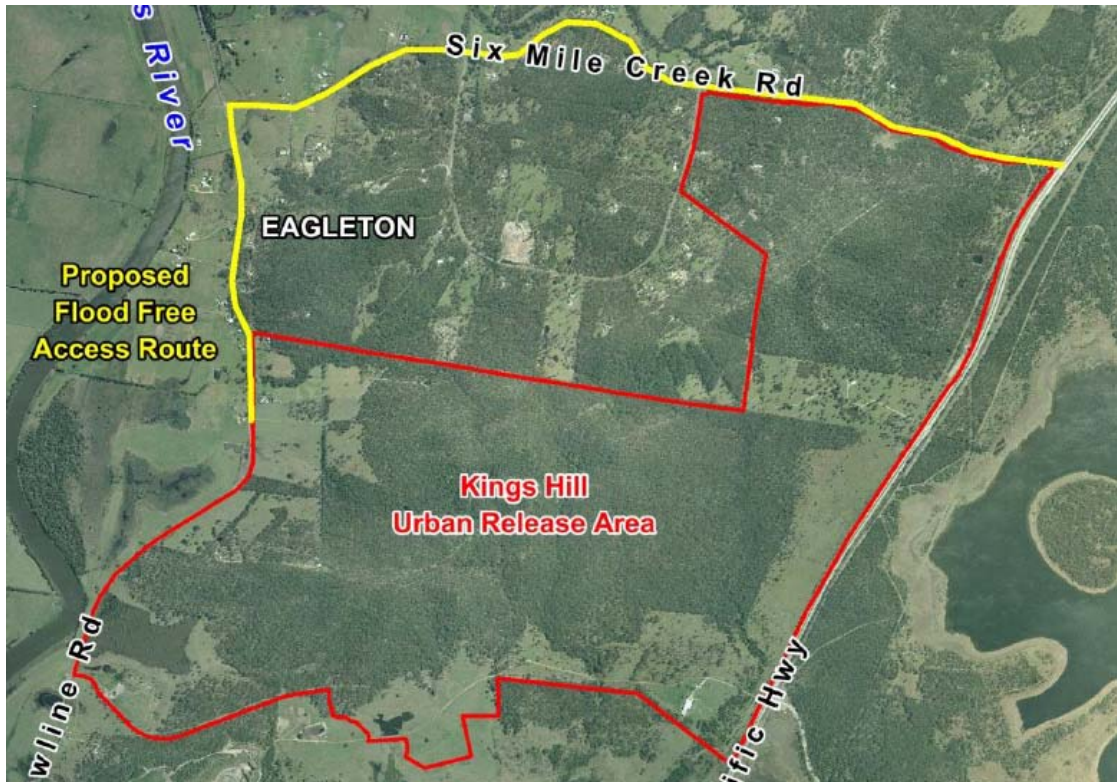
This section provides an assessment of potential alternative access routes to the Kings Hill site during major flood events.

Information contained in the Kings Hill Flood Free Access Study (2013 and Kings Hill Flood Free Access Review Study (2017) indicates:

- The most direct route to Raymond Terrace south is along Newline Road.
- The William River can inundate Newline Road to a significant depth, even for lower order flooding events and this access route was determined to be unsuitable.
- An alternative “flood free” access route was identified that connects to the Pacific Highway via Newline Road (to the north) and Six Mile Creek Road.
- The study identified a number of locations on Six Mile Road and Newline Road, that require to be raised for the provision of the flood free route (based on a one percent and five percent Annual Exceedance Probability (AEP)).
- The cost estimates for the works required to provide “flood immunity” range from \$40,000 for the best case (five percent AEP) scenario to \$2.1 million for the worst case scenario (one percent AEP).

The proposed flood free access route is displayed in Figure 6-5.

Figure 6-5 Kings Hill Proposed Flood Free Access Route



Source: Kings Hill Flood Free Access Study (2013)

It is recommended that the required scope of works be implemented to provide flood free access to / from the proposed Kings Hill Study Area.

7. Strategic Cost Estimates

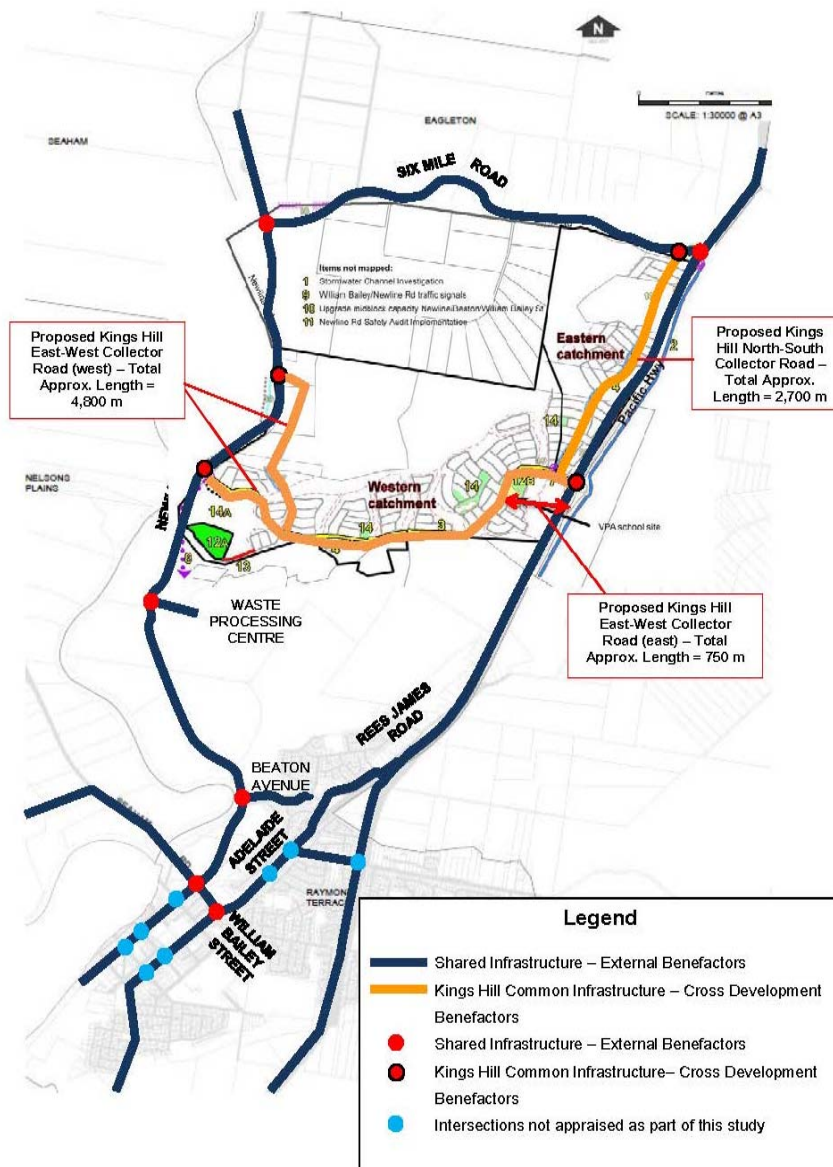
This section of the report provides strategic costs estimates for:

- Common infrastructure shared by Kings Hill landholders; and
- Shared infrastructure improvements on the external road network required for accommodating the increase in traffic.

Figure 7-1 provides an understanding of shared (external to Kings Hill) and common (Kings Hill) infrastructure relating to the development of the Kings Hill site and the likely benefactors from the proposed improvements.

Cost estimates for the proposed Pacific Highway interchange have not been provided as part of this study as detailed designs for the interchange are currently being developed by Roads and Maritime. More detailed costings will be provided as part of the detailed design stage.

Figure 7-1 Kings Hill Road Infrastructure Category Plan



The following qualifications and assumptions have been made in relation to the strategic cost estimates:

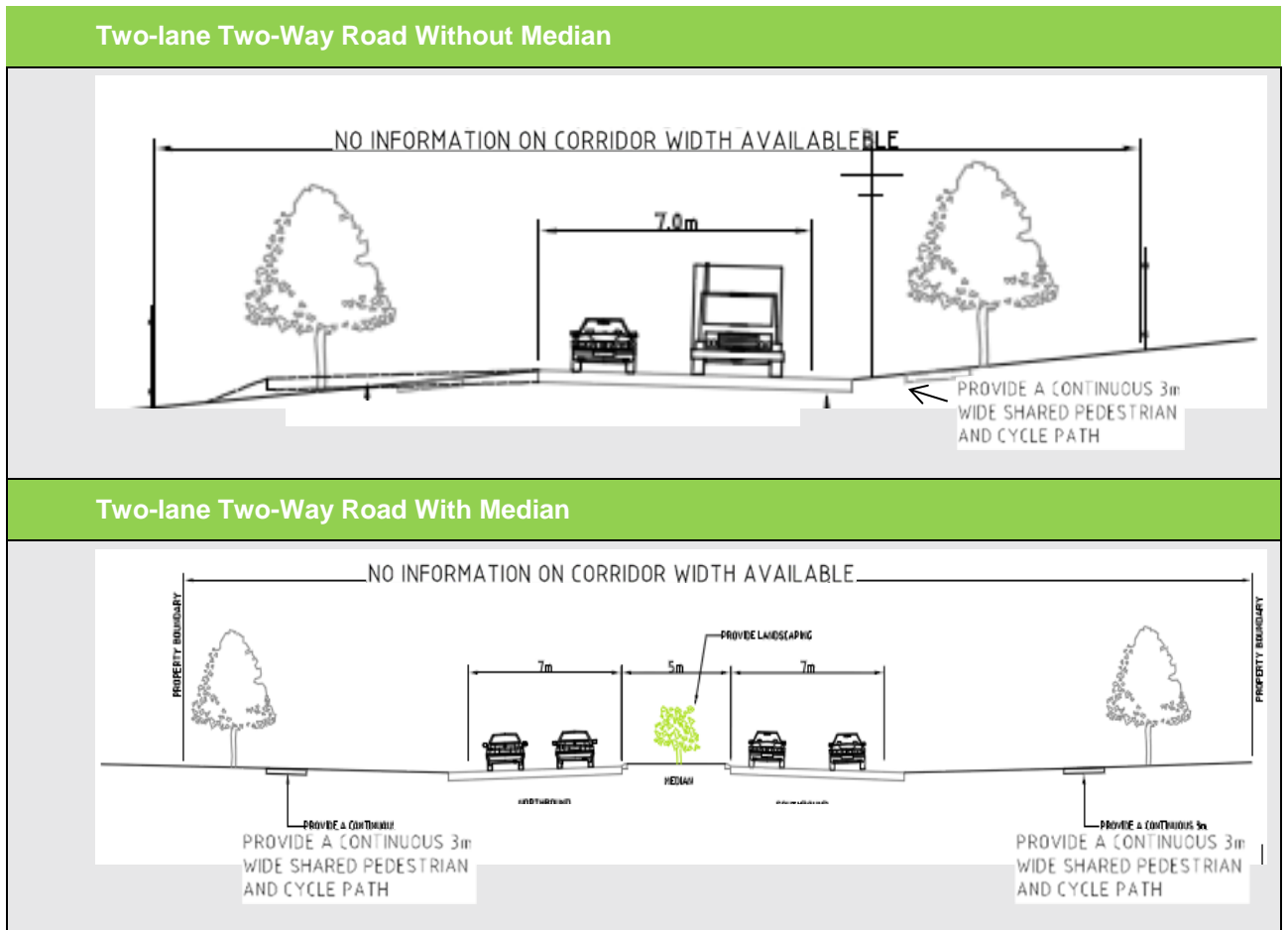
- Design information is currently unavailable and estimates are subsequently based on an assumed scope of work;
- Allowance has been included for delivery agency costs;
- The cost is an indicative range with an allowance of +/-30% contingency;
- No allowance has been included for escalation (estimates are based on pricing current at June 2012);
- No allowance has been included for property acquisition;
- No allowance has been made for the closure of existing access points to the Pacific Highway resulting from the construction of the proposed grade separated interchange associated with the development of Kings Hill;
- No allowance has been made for bridge crossings at creek locations;
- No allowance has been made for adjustment of existing properties;
- No allowance for land acquisition;
- No allowance for service adjustments;
- GST is excluded.
- The Order of Magnitude estimates have been based on pre-concept information only. Concept design information is currently unavailable and assumptions have subsequently been made in relation to scope, design and construction methodology.
- It is recommended that testing and monitoring of the assumptions be undertaken throughout the design development process. It is also recommended that ratification of the assumptions be made against detailed design information as it becomes available, noting that actual scope, methodologies, or costs may differ from the assumptions made as a part of this study. Detailed quotations have not been obtained for any element of the works. Market-sounding specific for this project has not been undertaken.
- The costs are based on the information currently available, as a result it is recommended that a review of costs against the detailed design information prior to the completion of feasibility studies and allocation of budgets/funding is undertaken.

7.1 Strategic Cost Estimates

It is noted that the cost estimates for the traffic items are based on a strategic level commensurate to the level of detail provided in the Kings Hill masterplan. The cost estimates are high level only and have been developed through benchmarking against similar projects in Local Government Areas in NSW. The cost estimates are based on typical cross-sections identified in Figure 7-2.

The scope of work was based on new and upgrade of roads within the area shown in Figure 7-1.

Figure 7-2 Typical Cross Road Sections



Source: GHD

Strategic cost estimates for both proposed common and shared infrastructure proposed to be provided to support the Kings Hill development is provided in Table 7-1. This includes assumptions for type, cost (excluding contingencies and common cost items), length, and traffic distribution by land use type. The apportionment of infrastructure costs is also provided.

Table 7-1 Strategic Cost Estimates and Apportionment of Costs for Proposed Common Infrastructure

Road Section	Type*	Indicative Length (m)	Unit Cost	Section Cost	Traffic Distribution	
					Traffic Growth	Kings Hill
Proposed Kings Hill East-West Collector Road (west)	NR1	4,800	\$2,750/m	\$13.2 m	0%	100%
Proposed Kings Hill East-West Collector Road (east)	NR2	750	\$4,500/m	\$3.38 m	0%	100%
Proposed Kings Hill North-South Collector Road	NR1	2,700	\$2,750/m	\$7.43 m	0%	100%
Proposed Newline Road/Kings Hill Intersections (x2)	Priority T-Intersection with Right Turn Bay	N/A	\$1,555,600	\$3.11 m	0%	100%

Road Section	Type*	Indicative Length (m)	Unit Cost	Section Cost	Traffic Distribution	
					Traffic Growth	Kings Hill
Proposed Six Mile Road/Kings Hill Intersection	Priority T-Intersection with Right Turn Bay	N/A	\$1,555,600	\$1.56 m	0%	100%
William Bailey Street Signal Controlled Intersection	Upgrade to Traffic Signals	N/A	\$3,354,000	\$3.35 m	55%	45%
Shared Pedestrian/Cycle Paths on Newline Road	Pedestrian/Cycle Paths	6,000	\$640/m	\$3.84 m		
Total				\$35.87 m	Excl. contingencies	

*Note - NR1 = New two-lane road without median; NR2 = New four-lane road with median. Total percentages of traffic distribution for each road may not equate to 100% due to rounding off.

The cost estimates are strategic and a contingency of +/- 30% should be accounted for at this stage of the project.

The traffic distribution identified provides guidance for allocation of project funding.

Assumption of traffic distribution is based on the development of full all-movements Pacific Highway interchange.

The data in Table 7-1 indicates that the order of magnitude costs associated with the Kings Hill Traffic and Transport infrastructure is in the order of \$36 m.

It is noted that the costings for the active transport route on Newline Road are associated with the provision of a separated (off road) path.

In addition to the above, consideration of the rehabilitation of pavement along Newline Road would be required at the detailed design stage of the development. This may be required to support the predicted increase along Newline Road, although this not been accounted for in the strategic cost estimates provided in this study. Any upgrade to Newline Road should consider the findings of a flooding impact study, which would be undertaken by Council.

The recommended reduction in signposted speed limit and associated traffic management treatment along Newline Road is assumed to be a standard council procedure and has not been accounted for in the cost estimates provided as part of this study.

8. Summary and Recommendations

8.1 Overview

GHD were commissioned by PSC to update the previous Kings Hill Traffic and Transport study, which was undertaken in 2012.

The proposed Kings Hill development is expected to be developed over the next 20 years and provide a total of 3,810 residential dwellings by 2037. A new town centre is also proposed to be provided on the south-eastern section of the site in close proximity to the Pacific Highway. The proposed development will include a school within the site, along with some additional retail and commercial development.

In order to identify development related trigger points for road infrastructure improvements, a Staging Plan (apportionment plan) was developed. This Staging Plan will inform discussions between PSC, Roads and Maritime and the Landholders on the timing and implementation of required network infrastructure upgrades. The Staging Plan and trigger points would assist the drafting of a Section 94 Plan that can be used to secure the provision of funding to undertake proposed works.

8.2 Key Findings

The following key findings were identified as part of this study:

- A review of existing public transport services found there is currently limited public transport access to the site.
- A review of active transport serving the site found there is limited pedestrian and cycling facilities serving the site.
- Midblock capacity analysis of the existing (2017) situation found that Adelaide Street is currently operating at LoS F during the PM peak period and William Bailey Street, operates at LoS E in the PM peak. All other streets in the study area operate satisfactorily.
- Intersection analysis of the existing (2017) situation found that all intersections in the study area operate with an acceptable LoS.
- Analysis of historical crash data found that there were a total of 57 crashes recorded within the study area. The following locations were identified to have crash trends:
 - At the Pacific Highway, near Rangers Road there were a number of crashes involving vehicles leaving the road and hitting an object. This could be associated with higher travel speeds and driver error.
 - At the Adelaide Street/William Bailey Street intersection, with a high number of rear end crashes were recorded.
 - At the William Bailey Street/Newline Road roundabout, a number of "cross traffic" crashes were recorded.
- Order of magnitude analysis indicates that costs associated with the Kings Hill Traffic and Transport infrastructure is in the order of \$36 m.

8.2.1 Future Network Performance

The operational performance of all intersections impacted by Kings Hill has been assessed using SIDRA 7 Intersection analysis software tool for each of the following scenarios:

- A – Existing road network with background traffic growth;

- B – Kings Hill development traffic and background traffic growth without the interchange;
- C – Kings Hill development traffic and background traffic with the full interchange

Existing Road Network and background traffic – Scenario A

The midblock capacity assessment for Scenario A indicates the following:

- Pacific Highway, Newline Road and Six Mile Road are likely to operate at a satisfactory LoS until 2037;
- Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily LoS;
- Port Stephens Street is expected to operate at an unsatisfactory LoS from 2022

The SIDRA modelling results for Scenario A indicates the following:

- The Newline Road/Seaham Road/William Bailey Street roundabout is expected to operate at LoS F in the PM peak by 2037.
- All other intersections are expected to operate with a satisfactory LoS in 2037.

Existing Road Network with Kings Hill Development – Scenario B

The midblock capacity assessment for Scenario B indicates the following:

- Pacific Highway and Six Mile Road are likely to operate at a satisfactory LoS until 2037;
- Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily LoS;
- Newline Road and Port Stephens Street are expected to operate at an unsatisfactory LoS by 2027
- The western section of the proposed Kings Hill east-west collector road is expected to operate at LoS F by 2027 as a two-way two-lane road. However, the proposed interchange is expected be constructed by this time (Roads and Maritime requires this interchange to be provided following the development of 400 lots at Kings Hill).

The SIDRA modelling results for Scenario B indicates the following:

- The Newline Road/William Bailey Street roundabout is expected to operate at LoS F by by 2022:
- The Adelaide Street/William Bailey Street intersection is is expected to operate at LoS F by by 2027:
- The Newline Road/Kings Hill access is expected to operate at an unsatisfactory LoS E (as a priority T-intersection) by 2022:
- The following intersections would operate at an unsatisfactory LoS F by by 2032:
 - Newline Road/Beaton Avenue
 - Newline Road/Waste Management Centre access

Kings Hill Development with Pacific Highway Interchange - Scenario C

The midblock capacity assessment for Scenario B indicates the following:

- Pacific Highway, Newline Road and Six Mile Road are likely to operate at a satisfactory LoS until 2037;
- Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily midblock LoS;

- The eastern section of the proposed Kings Hill east-west collector road would likely operate at an unsatisfactory LoS by 2027 as a two-way two-lane road (one lane in each direction). Two traffic lanes each way would be required to improve mid-block performance at this location.
- The western section of the proposed Kings Hill east-west collector road would operate satisfactorily in to 2037, as a two-way two-lane road (one traffic lane in each direction).

The SIDRA results, under Scenario C, indicate the following:

- The Newline Road/William Bailey Street roundabout is expected to operate at an unsatisfactory LoS E (PM peak only) by 2027 and at LoS F in 2032 (AM and PM peak):
- All other intersections are expected to operate at a satisfactory LoS C or better by 2037.
- The proposed left-in/left-out arrangement at the Pacific Highway/Six Mile Road intersection is expected to improve the intersection performance, as right turning vehicles would be forced to use the proposed Pacific Highway interchange

Proposed Intersection Upgrades

SIDRA intersection modelling has been undertaken for the William Bailey Street/Newline Road/Seaham Road/Port Stephens Street intersection to determine required mitigation measures, as this intersection is likely to perform unsatisfactorily by 2027 with the Kings Hill Development. It should be noted that the intersection would also need to be upgraded without the Kings Hill development by 2037, to accommodate forecast background traffic growth.

This assessment indicates that the following improvements would be required:

- Replacing the roundabout with a traffic signal controlled intersection; and
- Widening approaches to include left hand turn slip lanes and dedicated right hand turn lanes at each approach.

SIDRA modelling indicates that:

- The proposed intersection arrangement is expected to operate with a satisfactory LoS D during the weekday AM and PM peak periods in 2037.
- The 95th percentile queue length along the William Baily Street approach is expected to extend back to the intersection with Adelaide Street (assuming one full approach lane only). However, it is noted from the midblock capacity assessment indicates that two lanes in each direction may be needed along William Baily Street, which would reduce the expected 95th percentile queue length.

8.3 Key Recommendations

The following key recommendations have been identified as part of this study:

- Pedestrian and cycle links are provided to serve the proposed Kings Hill development in the form of shared pedestrian/cycle paths along Newline Road and the Pacific Highway/Adelaide Street, providing a connection between Raymond Terrace and Kings Hill.
- An indicative bus route serving the Kings Hill site has been identified and is recommended to be introduced to serve the development;

- Following the development of the Kings Hill site, Newline Road would function as a regional road. As such, the alignment and pavement quality may need to be upgraded to serve this need and should be addressed as part of the detailed stage plan for the site.
- For safety reasons, the existing 100km/h speed limit along Newline Road between the Kings Hill Site and Raymond Terrace should be reduced;
- Adelaide Street, William Bailey Street and Seaham Road currently operate at an unsatisfactorily midblock LoS. Newline Road is also expected to operate at LoS E by 2027. Capacity improvements, such as widening should be considered.
- The existing Newline Road/William Bailey Street roundabout is expected to operate with an unacceptable LoS following the development of 400 lots on the Kings Hill site in 2022. Infrastructure improvements, such as the proposed full 'all movements' interchange on the Pacific Highway should be provided to serve the Kings Hill Development by 2022;
- The eastern section of the proposed Kings Hill east-west collector road would require two lanes in each direction to serve the proposed ultimate development of this site (in 2037);
- The western section of the proposed Kings Hill east-west collector road would require one lane in each direction to serve the proposed ultimate development of this site (in 2037);
- The proposed Kings Hill north-south collector road would require one lane in each direction to serve the proposed ultimate development of this site (2037); and
- The William Bailey Street/Newline Road/Port Stephens Street intersection should be upgraded to traffic signals by 2027.
- It is recommended that the required scope of works be implemented to provide flood free access to / from the proposed Kings Hill Study Area.

Appendices

Appendix A – National and State Planning Guidelines

A summary of the relevant state and national planning guidelines is provided in the following sections.

8.3.1 National Urban Policy - 'Our Cities, Our Future' 2011

This policy provides a framework for improving productivity and providing a sustainable and liveable future. It is focused on the degree to which a place supports quality of life, health and wellbeing. It recognises that the design of buildings, placement of services, the structure of settlements and the provision of additional capacity is a major contributor to demand and the way the network performs, which can result in congestion. This can affect the liveability of a town or city from a transport perspective overall, which is influenced by an area's ability to offer users competitive non-car mode travel choices for accessing goods and services.

Increasing levels of car dependency is viewed to be directly related to traffic congestion, especially where infrastructure and public transport provision have not kept pace with growth rates. The response that is encouraged is to focus on sustainable and 'Whole of transport' solutions that takes into account all modes and all users and is not just dependent on the car for travel.

8.3.2 Integrating Land use and Transportation, TfNSW and Roads and Maritime, 2001

This document provides input into the transportation planning process for new urban developments. The Integrated Land Use and Transport Policy was set out to encourage new development to consider and understand how it can:

- Increase access to public transport, walking and cycling;
- Encourage people to travel shorter distances and make fewer trips; and
- Reduce car dependency.

The document highlights that new residential development areas present the best opportunities for delivering integrated planning solutions. Public transport needs to be integrated with measures to reduce car dependence, which can be achieved by planning for efficient locations, densities and facilities for main trip generators and maximise access to public transport services.

Ten key principles¹ to achieve accessible developments include:

6. Concentrate in centres;
7. Mix uses in centres;
8. Align centres within corridors;
9. Link public transport with land use strategies;
10. Connect streets;
11. Improve pedestrian access;
12. Improve bicycle access;

¹ *Integrating Land Use and Transport*, Transport NSW and Department of Urban Affairs and Planning, 2001

13. Manage parking supply;
14. Improve road management; and
15. Implement good urban design.

8.3.3 NSW 2021 Plan, NSW Government, 2011

NSW 2021 is a 10-year plan to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen the local environment and communities. The goals, targets and action plans identified in the NSW 2021 are used to set priorities for funding, guide decision making and to focus daily services.

NSW 2021 emphasises that an integrated transport system requires different transport modes to work together and in doing so, should:

- Be designed around the needs of the customer;
- Align with planning, policy and regulation;
- Support growth in public transport patronage;
- Maintain and improve a comprehensive network of smooth-flowing roads; and
- Provide cleaner, more reliable, safer, efficient and integrated transport services.

8.3.4 NSW Long Term Transport Master Plan (Transport for NSW, updated 2014)

The NSW Long Term Transport Master Plan is the overarching document to guide the NSW Government's transport funding priorities over the next 20 years.

Some of the key goals/primary actions applicable to Woollahra include:

- The provision of a fully integrated transport system.
- To improve and grow rail services
- Prioritising active transport connectivity to public transport interchanges.
- Improving public transport services and minimising travel times.
- Improve freight efficiencies through investment in road and rail networks.

8.3.5 Draft Future Transport Strategy 2056 (Transport for NSW, 2017)

The Draft Future Transport Strategy sets the NSW Government's 40-year vision, directions and outcomes framework for customer mobility in NSW, which will guide transport investment over the longer term.

This strategy is underpinned by the Draft Regional Services and Infrastructure Plan and the Draft Greater Sydney Services and Infrastructure Plan as well as a number of supporting plans including Road Safety and Tourism

8.3.6 Draft Regional NSW Services and Infrastructure Plan

The Draft Regional NSW Services and Infrastructure Plan is a vision for how transport can support growth and the economy of Regional New South Wales over the next 40 years. The Plan proposes that the most effective way of providing better transport in Regional NSW is through the development of a 'hub and spoke' network model radiating out from Regional Cities rather than a network just focused on Sydney.

The Plan identifies that planning for a safe, efficient and reliable transport network requires an integrated whole-of-government approach. Initiatives for investigation will include:

- Creating places for people – support principles of centre development, amenity enhancements, transport network connectivity, time of day management, walking and opportunities to dwell in city centres to support local identity and placemaking
- Local connectivity – improving local public transport, walking and cycling connectivity between railway station, airport, key land uses (health, education, retail, employment) and town centres
- Movement corridors – planning, design and management of major roads to be sensitive to centres and surrounding land use and planning for future bypasses using the Movement and Place principles, with whole-of-government multi-modal road and corridor planning, including 'last mile' connectivity and freight access for industry

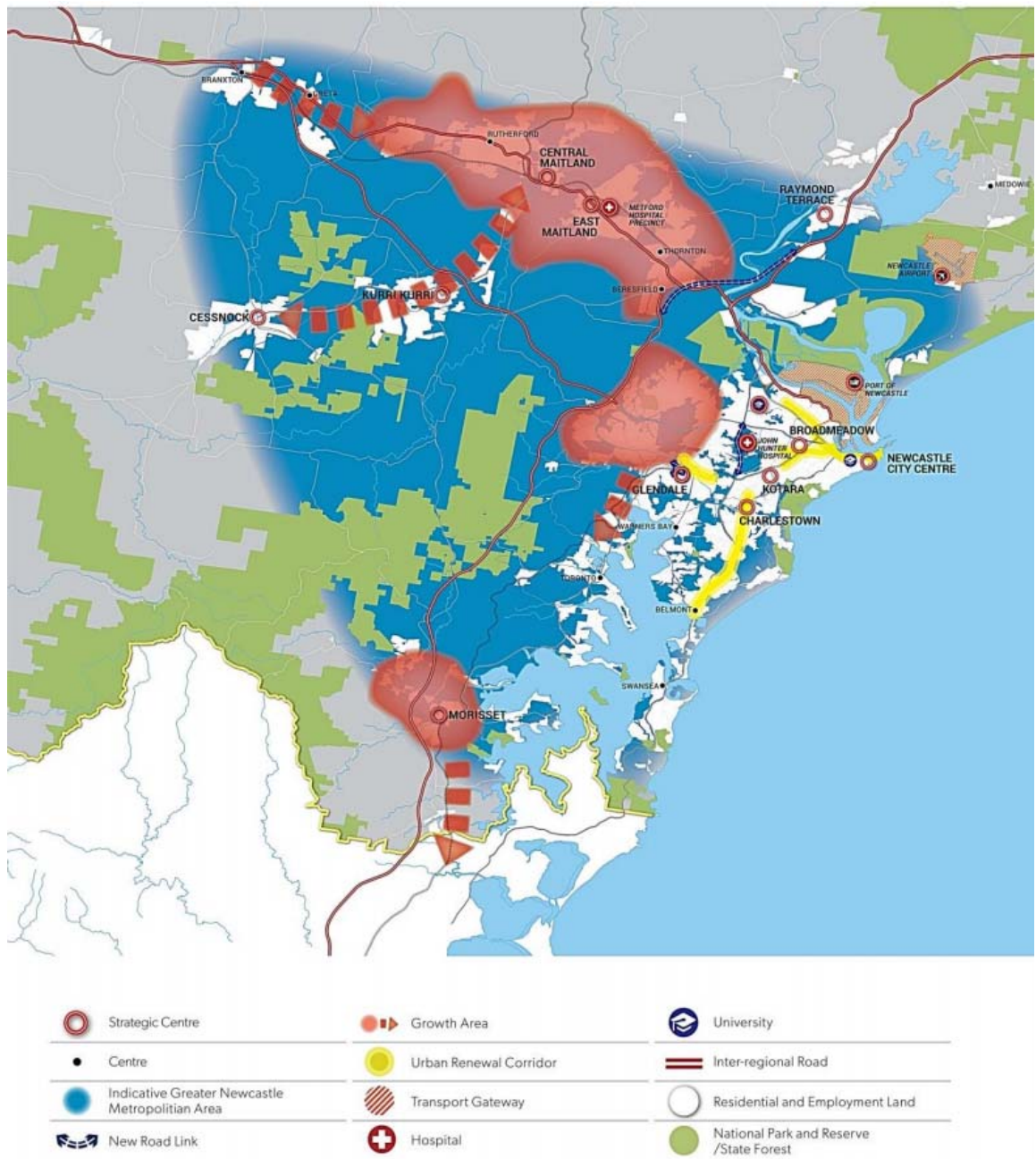
8.3.7 Draft Greater Newcastle Future Transport Plan (Transport for NSW, 2017)

The Draft Greater Newcastle Future Transport Plan is a supporting plan that considers the Greater Newcastle Area. It provides the overarching strategic transport network and vision that will guide future transport planning for the Greater Newcastle area.

It is a 'Supporting Plan' in the Future Transport suite. The 'Supporting Plans are more detailed issues-based or place-based planning documents that will support the implementation of Future Transport 2056.

Greater Newcastle's strategic centres, urban renewal corridors and growth areas identifies Raymond Terrace as a strategic centre. As shown, a growth area is identified to the west of Raymond Terrace at Maitland. The Plan also identifies a forecast population increase at Raymond Terrace of around 7,000 people, which could primarily be associated with the proposed development at Kings Hill.

Figure 8-1 Greater Newcastle's strategic centres, urban renewal corridors and growth areas



Source: <https://future.transport.nsw.gov.au/wp-content/uploads/2017/03/Draft-Greater-Newcastle-FT-Supporting-Plan.pdf>

8.4 Planning Principles

The following provides a description of desirable integrated land use and transport planning principles that should be considered and used to guide the development of new large scale urban settlements.

8.4.1 A Sustainable and Balanced Transport System

New developments, such as Kings Hill, should be established on the basis of a sustainable transport network that attempts to reduce private vehicle use and in doing so, create a safer, more attractive and environmentally sound community. This can be achieved with the aid of sustainable planning principles and management strategies implemented throughout the development's planning and delivery.

Key objectives of a sustainable transport strategy for a new development should include:

- Provision of a self-contained 'town centre' that provides for the day to day needs for its residents within a short walk of all homes;
- Providing a balance through integrating urban form with the transport network, so that trip generating land uses and transport systems work together and encourage fewer car trips and shorter travel distances to access local services; and
- Provision of a customer focused public transport service, on and off-road walking and cycling routes, and walkable traffic calmed environments. With an aim of offering attractive alternatives that can reduce the use of private vehicles and in doing so, lower the environmental impacts of the transport network.

Through the implementation of strategies to achieve the above objectives, new development such as Kings Hill should promote a change in travel behaviour as compared to the typically 'business as usual' approach. Positive outcomes would include more efficient use of infrastructure, lower environmental impacts and a healthier community, which would assist in meeting the planning objectives highlighted in Section —.

8.4.2 Transport Network Structure and Functionality

When integrating transportation planning with the master planning of new places, the following typically needs to be recognised and adopted in the design:

- The role transportation will play in activating and animating the site;
- The role of each road link serving the development and its range of travel functions, which generally include a combination of:
 - pedestrian/community
 - bicycle
 - transit
 - local access
 - traffic arterial
- The access hierarchy and role of different elements of the transportation network plays overtime, including streets, intersections, interchanges and even reservations and the need to accommodate changes to meet demands and expectations; and
- Identification of appropriate levels of accessibility as a place evolves, and to plan both the delivery of active transport infrastructure and transit operations accordingly with consideration of design needs from the earliest stages of development.

The DCP specifies that the Kings Hill Transport Hierarchy should provide:

- A safe and simple movement system should be provided for public transport, private vehicles, pedestrians and cyclists; and
- The transport movement hierarchy should be consistent with the Local Control Map.

8.4.3 Designing the Road Network

An integrated road system should consider the travel needs of its users and align this with accessibility needs and policy objectives. In doing so, it is expected to ensure the following outcomes:

- An interconnected, legible, urban-scale street pattern that will provide a pedestrian-friendly environment and optimal opportunities for bus servicing and access;
- A street network that is developed on the basis of promoting local access rather than regional traffic; and
- Road hierarchy that is compatible with the land use and range of roles that each street serves. This would typically incorporate a network of collector roads that distribute traffic within developments, and to provide access into parking areas.

The planned street system should promote the efficient movement of the local population by offering opportunities to separate trip types, by offering alternative routes and reducing the dependency on private vehicle travel. Overall, the transport network should offer a high degree of permeability between neighbourhoods, town centres and recreational areas, in a manner that promotes alternative travel modes such as walking, cycling and public transport.

The hierarchy of roads should be designed to:

- Focus around a Centre, which could include a Main Street, which is operated under traffic control and designed to offer accessibility to adjacent land uses rather than mobility; and
- Provide quality access to residential areas, which protects them from excessive through traffic.

Local streets within development such as Kings Hill should be designed to calm traffic according to the purpose of the road. Local streets will allow for through movement at appropriate speeds, it is noted that a speed of less than 40km/h provides an attractive and safer environment for pedestrians and cyclists of all ages and skill levels. By adopting principles such as providing for a narrow carriageway within a wide road reserve, it offers an opportunity for pedestrians and off-road cyclists to navigate the new development via a network of shared paths. Consideration should also be given to the design needs of service vehicles and bus services at intersections. A low speed road environment and minimal use of roundabouts at intersections is deemed to provide a safer environment for all road users, especially pedestrians and cyclists.

The Kings Hill DCP specifies that for the road networks:

- The collector road network should be consistent with the Local Control Map (see Figure 2-1);
- The eastern end of the east-west collector road for a length of approximately one kilometre should have two travel lanes in each directions; and
- The maximum number of lots with sole access to Newline Road is 1,200. Consent for lots in excess of this number requires connection to the Pacific Highway via the east-west collector road. However, it is noted that Roads and Maritime requires the development of a full (all movements) grade separated interchange at the Pacific Highway to serve the Kings Hill site, following the development of 400 residential lots.

8.4.4 Public Transport

Ideally, roads with public transport links running along them should front land uses that have a mix of uses in order to attract and generate trips, and these should be land uses with the highest densities. On this basis, roads in the Kings Hill network where public transport is planned should possess the following features:

- Run through the core of development in proximity to the town centre main street, local shops, schools, and other community facilities and services (to maximise exposure and patronage potential);
- Constitute attractive and active pedestrian environments, incorporating good levels of pedestrian connectivity to and along the public transport links (accessible to the community);
- Offer an efficient route through the development to allow for bus fleet assets to be maximised, journey travel times to be minimised, to maximise the potential patronage demand catchment potential and allow a desirable service frequency level to be achieved (sustainable services through exposure and maximising assets and service levels);
- Concentrate development with the highest density closest to the public transport system and planned bus stops to attract and achieve the highest potential mode share to public transport (shape the development to make public transport a travel option);
- Focus local and regional open space corridors away from the public transport corridor, as this tends to break down the immediacy between land use and public transport and impact on patronage potential (avoid low patronage catchments within the urban development); and
- Offer direct access to key activity hubs, transport interchanges and employment centres (consider routes that service Raymond Terrace, Newcastle, and Williamtown).

The Kings Hill DCP specifies that for public transport:

- The public transport routes identified in the Local Control Map (see Figure 2-1) should be constructed as bus routes in accordance with infrastructure specification-design; and
- Bus stops locations should be identified in prior to final completion.

8.4.5 Active Transport

In order to improve modal split targets and environmental outcomes in areas planned for new development, it is necessary to build the transportation and access network from the 'bottom-up' (i.e. pedestrian and cyclist) as well as the 'top-down' (bus routes and services and parking). A transportation strategy and masterplan design must address these elements and plan for the provision of high quality facilities for pedestrians and cyclists. This planning needs to direct the design towards the provision of a safe, amenable and attractive pedestrian environment in all streets. At the same time, cycling should be promoted through the provision of dedicated bicycle facilities and a network of streets that is legible and visualised by users to offer a safe cycling environment through traffic planning, carriageway design and streetscape treatments.

At a regional level, external route links and end of trip facilities should be encouraged, such as bicycle lockers for commuters and shoppers and bike parking infrastructure that perform an integral element of Kings Hill town centre, Raymond Terrace major centre and other employment centre streetscapes. The establishment of regional walking and cycling trails in Kings Hill that extend beyond the precinct boundaries will help to support its integration with other external areas, particularly those within short distances. This includes links to the Raymond Terrace and the Pacific Highway, which may be achieved through the provision of cycle links along Newline Road or the Pacific Highway and the proposed signalisation of

Newline Road/William Bailey Street/Port Stephens Street roundabout. It is expected that the potential user groups would include schoolchildren, especially when most school facilities serving the area will be situated in Raymond Terrace.

The PSC DCP specifies that for active transport:

- The pedestrian and cycle paths should be consistent with the Local Control Map (see Figure 2-1)
- A pedestrian footpaths and shared paths should be constructed on:
 - All collector roads
 - All roads within a B2 Local Centre Zone and B4 Mixed Use Zone
 - All roads with primary frontage to a school or major community facility
- End of trip facilities should be provided at precinct centres, community facilities and regional parks.

8.4.6 Parking

There is a strong link between parking provision and travel behaviour, and that it is a critical element of the transport policy. It is sometimes necessary to develop a staged approach to parking provision that balances the short-term needs with the long-term objectives for sustainable parking management.

A range of measures are typically adopted to achieve objectives relating to parking provision, which can include:

- Physical planning and design (balancing travel and encouraging by offering opportunities for travel by non-car based modes);
- Provision rates (maximum car parking rates which consider mass and local trips purposes overtime);
- Management of parking provision (long term versus short term, function and accessibility indexes); and
- Regional approach to parking provision (end trip provision, consistency and relationship with accessibility indexes).

Appendix B – SIDRA Results

Base SIDRA Results

MOVEMENT SUMMARY

 Site: 1 [2017 AM Base William Bailey-Newline]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	127	3.9	0.153	6.7	LOS A	0.9	6.2	0.63	0.69	53.4
2	T1	37	5.4	0.140	6.4	LOS A	0.8	6.0	0.63	0.71	52.4
3	R2	94	4.3	0.140	11.3	LOS A	0.8	6.0	0.63	0.71	52.4
Approach		258	4.3	0.153	8.3	LOS A	0.9	6.2	0.63	0.70	52.9
East: William Bailey St											
4	L2	243	3.3	0.261	6.8	LOS A	1.6	11.4	0.63	0.69	53.4
5	T1	481	5.2	0.435	6.5	LOS A	3.2	25.3	0.69	0.65	53.7
6	R2	45	33.3	0.435	12.3	LOS A	3.2	25.3	0.69	0.65	52.7
Approach		769	6.2	0.435	6.9	LOS A	3.2	25.3	0.67	0.66	53.6
North: Newline Rd											
7	L2	46	23.9	0.254	8.4	LOS A	1.2	9.5	0.67	0.81	51.5
8	T1	96	0.0	0.254	7.6	LOS A	1.2	9.5	0.67	0.81	53.5
9	R2	33	9.1	0.254	13.0	LOS A	1.2	9.5	0.67	0.81	53.2
Approach		175	8.0	0.254	8.8	LOS A	1.2	9.5	0.67	0.81	52.9
West: Seahman Road											
10	L2	20	0.0	0.168	5.1	LOS A	0.9	7.1	0.41	0.49	53.9
11	T1	426	6.6	0.412	5.0	LOS A	3.1	22.9	0.44	0.55	54.1
12	R2	350	2.3	0.412	9.8	LOS A	3.1	22.9	0.45	0.58	53.5
Approach		796	4.5	0.412	7.1	LOS A	3.1	22.9	0.44	0.56	53.8
All Vehicles		1998	5.5	0.435	7.4	LOS A	3.2	25.3	0.58	0.64	53.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 1 [2017 PM Base William Bailey-Newline]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	380	2.1	0.510	9.3	LOS A	3.8	27.3	0.81	0.93	51.6
2	T1	135	1.5	0.547	8.9	LOS A	4.6	32.7	0.83	0.94	51.0
3	R2	351	1.1	0.547	13.8	LOS A	4.6	32.7	0.83	0.94	51.0
Approach		866	1.6	0.547	11.1	LOS A	4.6	32.7	0.82	0.94	51.2
East: William Bailey St											
4	L2	170	3.5	0.186	5.9	LOS A	1.1	7.7	0.53	0.60	53.8
5	T1	619	6.0	0.482	5.7	LOS A	3.9	29.2	0.62	0.56	54.1
6	R2	37	5.4	0.482	10.6	LOS A	3.9	29.2	0.62	0.56	54.1
Approach		826	5.4	0.482	5.9	LOS A	3.9	29.2	0.60	0.57	54.1
North: Newline Rd											
7	L2	29	10.3	0.226	8.7	LOS A	1.2	8.9	0.74	0.85	51.5
8	T1	86	0.0	0.226	8.5	LOS A	1.2	8.9	0.74	0.85	53.2
9	R2	23	17.4	0.226	14.2	LOS A	1.2	8.9	0.74	0.85	52.5
Approach		138	5.1	0.226	9.5	LOS A	1.2	8.9	0.74	0.85	52.7
West: Seahman Road											
10	L2	43	7.0	0.190	7.3	LOS A	1.2	9.2	0.69	0.70	52.4
11	T1	421	6.4	0.467	6.9	LOS A	3.9	29.9	0.77	0.71	52.9
12	R2	201	3.5	0.467	11.7	LOS A	3.9	29.9	0.80	0.71	52.6
Approach		665	5.6	0.467	8.4	LOS A	3.9	29.9	0.78	0.71	52.8
All Vehicles		2495	4.1	0.547	8.6	LOS A	4.6	32.7	0.73	0.75	52.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 1 [2022 AM Base William Bailey-Newline]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	140	3.9	0.181	7.1	LOS A	1.1	7.7	0.69	0.73	53.2
2	T1	41	5.3	0.166	6.7	LOS A	1.0	7.5	0.68	0.74	52.2
3	R2	103	4.3	0.166	11.7	LOS A	1.0	7.5	0.68	0.74	52.2
Approach		284	4.3	0.181	8.7	LOS A	1.1	7.7	0.69	0.74	52.7
East: William Bailey St											
4	L2	268	3.3	0.299	7.2	LOS A	1.9	13.6	0.68	0.72	53.1
5	T1	530	5.2	0.496	7.0	LOS A	4.0	31.1	0.75	0.70	53.4
6	R2	50	33.3	0.496	12.9	LOS A	4.0	31.1	0.75	0.70	52.4
Approach		847	6.2	0.496	7.4	LOS A	4.0	31.1	0.73	0.71	53.3
North: Newline Rd											
7	L2	48	23.9	0.286	9.0	LOS A	1.4	11.1	0.71	0.85	51.2
8	T1	101	0.0	0.286	8.1	LOS A	1.4	11.1	0.71	0.85	53.2
9	R2	35	9.2	0.286	13.5	LOS A	1.4	11.1	0.71	0.85	52.9
Approach		184	8.0	0.286	9.4	LOS A	1.4	11.1	0.71	0.85	52.6
West: Seahman Road											
10	L2	22	0.0	0.187	5.2	LOS A	1.1	8.2	0.44	0.51	53.7
11	T1	469	6.6	0.460	5.2	LOS A	3.7	27.1	0.48	0.56	53.9
12	R2	385	2.3	0.460	10.0	LOS A	3.7	27.1	0.50	0.59	53.4
Approach		876	4.5	0.460	7.3	LOS A	3.7	27.1	0.49	0.57	53.7
All Vehicles		2191	5.4	0.496	7.7	LOS A	4.0	31.1	0.63	0.67	53.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 Site: 1 [2022 PM Base William Bailey-Newline]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Port Stephens St											
1	L2	418	2.1	0.614	11.8	LOS A	5.4	39.0	0.90	1.05	49.8
2	T1	148	1.5	0.654	11.4	LOS A	6.7	47.5	0.93	1.06	49.3
3	R2	386	1.1	0.654	16.4	LOS B	6.7	47.5	0.93	1.06	49.4
Approach		952	1.6	0.654	13.6	LOS A	6.7	47.5	0.92	1.06	49.6
East: William Bailey St											
4	L2	187	3.5	0.209	6.1	LOS A	1.2	8.9	0.56	0.63	53.7
5	T1	681	6.0	0.544	5.9	LOS A	4.7	35.2	0.69	0.59	53.8
6	R2	41	5.4	0.544	10.9	LOS A	4.7	35.2	0.69	0.59	53.8
Approach		908	5.5	0.544	6.2	LOS A	4.7	35.2	0.66	0.59	53.8
North: Newline Rd											
7	L2	30	10.3	0.264	9.5	LOS A	1.4	10.8	0.79	0.89	51.0
8	T1	90	0.0	0.264	9.3	LOS A	1.4	10.8	0.79	0.89	52.6
9	R2	24	17.5	0.264	15.1	LOS B	1.4	10.8	0.79	0.89	51.9
Approach		145	5.1	0.264	10.3	LOS A	1.4	10.8	0.79	0.89	52.1
West: Seahman Road											
10	L2	47	7.0	0.224	7.7	LOS A	1.5	11.3	0.75	0.74	52.2
11	T1	463	6.4	0.549	7.9	LOS A	5.5	41.6	0.86	0.81	52.4
12	R2	221	3.5	0.549	12.9	LOS A	5.5	41.6	0.89	0.83	52.0
Approach		731	5.6	0.549	9.4	LOS A	5.5	41.6	0.86	0.81	52.3
All Vehicles		2736	4.1	0.654	9.8	LOS A	6.7	47.5	0.81	0.83	51.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 1 [2027 AM Base William Bailey-Newline]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	152	3.9	0.214	7.6	LOS A	1.3	9.6	0.74	0.78	52.8
2	T1	44	5.4	0.194	7.2	LOS A	1.3	9.3	0.74	0.77	51.9
3	R2	113	4.3	0.194	12.1	LOS A	1.3	9.3	0.74	0.77	51.9
Approach		309	4.3	0.214	9.2	LOS A	1.3	9.6	0.74	0.77	52.3
East: William Bailey St											
4	L2	292	3.3	0.339	7.6	LOS A	2.2	16.1	0.72	0.76	52.8
5	T1	577	5.2	0.562	8.2	LOS A	5.4	41.8	0.82	0.82	53.1
6	R2	54	33.3	0.562	14.1	LOS A	5.4	41.8	0.82	0.82	52.0
Approach		923	6.2	0.562	8.3	LOS A	5.4	41.8	0.79	0.80	52.9
North: Newline Rd											
7	L2	51	23.9	0.323	9.7	LOS A	1.7	13.1	0.76	0.87	50.7
8	T1	106	0.0	0.323	8.8	LOS A	1.7	13.1	0.76	0.87	52.7
9	R2	36	9.1	0.323	14.2	LOS A	1.7	13.1	0.76	0.87	52.4
Approach		193	8.0	0.323	10.0	LOS A	1.7	13.1	0.76	0.87	52.1
West: Seahman Road											
10	L2	24	0.0	0.208	5.3	LOS A	1.2	9.3	0.46	0.52	53.6
11	T1	512	6.6	0.510	5.3	LOS A	4.3	31.9	0.52	0.57	53.8
12	R2	420	2.3	0.510	10.1	LOS A	4.3	31.9	0.55	0.60	53.2
Approach		955	4.5	0.510	7.4	LOS A	4.3	31.9	0.53	0.58	53.5
All Vehicles		2380	5.4	0.562	8.2	LOS A	5.4	41.8	0.68	0.72	53.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 1 [2027 PM Base William Bailey-Newline]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	456	2.1	0.745	16.9	LOS B	8.3	59.2	0.99	1.19	46.5
2	T1	162	1.5	0.787	17.2	LOS B	10.7	75.4	1.00	1.24	45.9
3	R2	421	1.1	0.787	22.1	LOS B	10.7	75.4	1.00	1.24	45.9
Approach		1039	1.6	0.787	19.1	LOS B	10.7	75.4	1.00	1.22	46.2
East: William Bailey St											
4	L2	204	3.5	0.234	6.3	LOS A	1.4	10.3	0.60	0.65	53.5
5	T1	742	6.0	0.609	6.6	LOS A	6.0	45.5	0.76	0.67	53.5
6	R2	44	5.4	0.609	11.6	LOS A	6.0	45.5	0.76	0.67	53.5
Approach		991	5.4	0.609	6.8	LOS A	6.0	45.5	0.73	0.66	53.5
North: Newline Rd											
7	L2	32	10.1	0.309	10.5	LOS A	1.7	13.1	0.84	0.91	50.3
8	T1	95	0.0	0.309	10.2	LOS A	1.7	13.1	0.84	0.91	51.8
9	R2	25	17.4	0.309	16.1	LOS B	1.7	13.1	0.84	0.91	51.3
Approach		152	5.0	0.309	11.3	LOS A	1.7	13.1	0.84	0.91	51.4
West: Seahman Road											
10	L2	52	7.0	0.262	8.2	LOS A	1.8	13.9	0.80	0.79	51.9
11	T1	505	6.4	0.644	9.7	LOS A	7.8	59.1	0.94	0.92	51.7
12	R2	241	3.5	0.644	15.1	LOS B	7.8	59.1	0.98	0.97	51.2
Approach		798	5.6	0.644	11.2	LOS A	7.8	59.1	0.94	0.93	51.5
All Vehicles		2980	4.1	0.787	12.5	LOS A	10.7	75.4	0.88	0.94	50.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 1 [2031 AM Base William Bailey-Newline]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Port Stephens St											
1	L2	162	3.9	0.246	8.1	LOS A	1.6	11.5	0.79	0.81	52.5
2	T1	47	5.4	0.222	7.6	LOS A	1.5	11.1	0.79	0.80	51.6
3	R2	120	4.3	0.222	12.5	LOS A	1.5	11.1	0.79	0.80	51.6
Approach		330	4.3	0.246	9.6	LOS A	1.6	11.5	0.79	0.81	52.0
East: William Bailey St											
4	L2	311	3.3	0.376	8.0	LOS A	2.6	18.4	0.76	0.79	52.5
5	T1	616	5.2	0.620	9.4	LOS A	6.8	53.0	0.88	0.90	52.8
6	R2	58	33.3	0.620	15.5	LOS B	6.8	53.0	0.88	0.90	51.7
Approach		985	6.2	0.620	9.3	LOS A	6.8	53.0	0.84	0.86	52.6
North: Newline Rd											
7	L2	52	23.9	0.355	10.6	LOS A	1.9	15.3	0.79	0.91	50.1
8	T1	109	0.0	0.355	9.6	LOS A	1.9	15.3	0.79	0.91	52.1
9	R2	38	9.1	0.355	15.1	LOS B	1.9	15.3	0.79	0.91	51.8
Approach		199	8.0	0.355	10.9	LOS A	1.9	15.3	0.79	0.91	51.5
West: Seahman Road											
10	L2	26	0.0	0.224	5.4	LOS A	1.3	10.2	0.49	0.54	53.5
11	T1	545	6.6	0.551	5.5	LOS A	4.9	36.3	0.56	0.59	53.6
12	R2	448	2.3	0.551	10.3	LOS A	4.9	36.3	0.60	0.61	53.0
Approach		1019	4.5	0.551	7.6	LOS A	4.9	36.3	0.57	0.60	53.4
All Vehicles		2533	5.4	0.620	8.8	LOS A	6.8	53.0	0.72	0.75	52.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 1 [2031 PM Base William Bailey-Newline]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	486	2.1	0.871	29.1	LOS C	13.5	96.5	1.00	1.42	40.3
2	T1	173	1.5	0.913	34.0	LOS C	19.6	138.7	1.00	1.60	38.2
3	R2	449	1.1	0.913	38.9	LOS C	19.6	138.7	1.00	1.60	38.2
Approach		1108	1.6	0.913	33.8	LOS C	19.6	138.7	1.00	1.52	39.1
East: William Bailey St											
4	L2	218	3.5	0.255	6.5	LOS A	1.6	11.4	0.62	0.67	53.5
5	T1	792	6.0	0.662	7.5	LOS A	7.5	56.6	0.81	0.76	53.2
6	R2	48	5.4	0.662	12.4	LOS A	7.5	56.6	0.82	0.76	53.2
Approach		1058	5.4	0.662	7.5	LOS A	7.5	56.6	0.77	0.74	53.2
North: Newline Rd											
7	L2	33	10.4	0.348	12.0	LOS A	2.1	15.6	0.87	0.95	49.4
8	T1	98	0.0	0.348	11.6	LOS A	2.1	15.6	0.87	0.95	50.8
9	R2	26	17.4	0.348	17.6	LOS B	2.1	15.6	0.87	0.95	50.3
Approach		157	5.1	0.348	12.7	LOS A	2.1	15.6	0.87	0.95	50.4
West: Seahman Road											
10	L2	55	7.0	0.293	8.6	LOS A	2.0	15.9	0.83	0.82	51.7
11	T1	539	6.4	0.720	11.8	LOS A	10.2	77.2	0.96	1.00	50.2
12	R2	257	3.5	0.720	17.7	LOS B	10.2	77.2	1.00	1.06	49.4
Approach		851	5.6	0.720	13.4	LOS A	10.2	77.2	0.96	1.01	50.1
All Vehicles		3173	4.1	0.913	18.5	LOS B	19.6	138.7	0.91	1.10	46.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 Site: 1 [2037 AM Base William Bailey-Newline]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Port Stephens St											
1	L2	178	3.9	0.306	8.8	LOS A	2.1	15.1	0.86	0.88	51.9
2	T1	52	5.4	0.272	8.2	LOS A	2.0	14.5	0.86	0.85	51.2
3	R2	132	4.3	0.272	13.1	LOS A	2.0	14.5	0.86	0.85	51.2
Approach		361	4.3	0.306	10.3	LOS A	2.1	15.1	0.86	0.86	51.6
East: William Bailey St											
4	L2	340	3.3	0.436	8.9	LOS A	3.2	23.3	0.82	0.85	51.9
5	T1	673	5.2	0.716	12.4	LOS A	9.9	77.1	0.97	1.05	50.7
6	R2	63	33.3	0.716	18.5	LOS B	9.9	77.1	0.97	1.05	49.7
Approach		1076	6.2	0.716	11.6	LOS A	9.9	77.1	0.92	0.99	51.0
North: Newline Rd											
7	L2	55	23.9	0.417	12.5	LOS A	2.5	19.6	0.84	0.96	49.0
8	T1	115	0.0	0.417	11.4	LOS A	2.5	19.6	0.84	0.96	50.8
9	R2	40	9.1	0.417	16.9	LOS B	2.5	19.6	0.84	0.96	50.5
Approach		210	8.0	0.417	12.7	LOS A	2.5	19.6	0.84	0.96	50.2
West: Seahman Road											
10	L2	28	0.0	0.250	5.6	LOS A	1.5	11.7	0.52	0.56	53.3
11	T1	596	6.6	0.615	5.7	LOS A	5.9	43.8	0.62	0.61	53.4
12	R2	490	2.3	0.615	10.5	LOS A	5.9	43.8	0.67	0.63	52.8
Approach		1114	4.5	0.615	7.8	LOS A	5.9	43.8	0.64	0.62	53.1
All Vehicles		2762	5.4	0.716	10.0	LOS A	9.9	77.1	0.79	0.82	51.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 Site: 1 [2037 PM Base William Bailey-Newline]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	532	2.1	1.114	246.8	LOS F	86.8	621.3	1.00	4.53	11.8
2	T1	189	1.5	1.155	311.5	LOS F	134.0	947.8	1.00	5.95	10.0
3	R2	492	1.1	1.155	316.4	LOS F	134.0	947.8	1.00	5.95	10.1
Approach		1213	1.6	1.155	285.1	LOS F	134.0	947.8	1.00	5.32	10.7
East: William Bailey St											
4	L2	238	3.5	0.286	6.7	LOS A	1.8	13.2	0.65	0.69	53.3
5	T1	867	6.0	0.743	9.3	LOS A	10.5	78.8	0.90	0.87	52.7
6	R2	52	5.4	0.743	14.2	LOS A	10.5	78.8	0.90	0.87	52.7
Approach		1157	5.4	0.743	9.0	LOS A	10.5	78.8	0.85	0.84	52.8
North: Newline Rd											
7	L2	35	10.3	0.390	13.4	LOS A	2.4	18.3	0.89	0.98	48.5
8	T1	103	0.0	0.390	13.0	LOS A	2.4	18.3	0.89	0.98	49.9
9	R2	28	17.4	0.390	19.0	LOS B	2.4	18.3	0.89	0.98	49.4
Approach		165	5.1	0.390	14.1	LOS A	2.4	18.3	0.89	0.98	49.5
West: Seahman Road											
10	L2	60	7.0	0.310	8.4	LOS A	2.2	16.8	0.82	0.82	51.8
11	T1	590	6.4	0.762	12.4	LOS A	11.8	89.6	0.96	1.03	49.8
12	R2	282	3.5	0.762	18.6	LOS B	11.8	89.6	1.00	1.09	48.8
Approach		932	5.6	0.762	14.1	LOS A	11.8	89.6	0.96	1.03	49.6
All Vehicles		3467	4.1	1.155	107.2	LOS F	134.0	947.8	0.93	2.47	22.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2017 AM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 139 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Adelaide St												
1	L2	214	13.6	0.200	6.4	LOS A	1.3	10.6	0.15	0.59	53.2	
2	T1	151	7.3	0.576	69.1	LOS E	5.8	42.7	0.99	0.76	28.1	
Approach		365	11.0	0.576	32.3	LOS C	5.8	42.7	0.50	0.66	38.9	
North: Adelaide St												
8	T1	333	1.5	0.133	4.4	LOS A	1.7	12.0	0.16	0.14	55.9	
9	R2	551	3.4	0.541	7.6	LOS A	3.9	28.2	0.14	0.62	51.9	
Approach		884	2.7	0.541	6.4	LOS A	3.9	28.2	0.15	0.44	53.4	
West: William Bailey St (RT Stage 1)												
10	L2	311	7.1	0.204	6.6	LOS A	2.3	18.0	0.16	0.59	53.2	
12	R2	265	6.8	0.576	52.7	LOS D	14.6	113.5	0.86	0.81	31.4	
Approach		576	6.9	0.576	27.8	LOS B	14.6	113.5	0.48	0.69	40.4	
All Vehicles		1825	5.7	0.576	18.3	LOS B	14.6	113.5	0.32	0.56	45.4	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	46.8	LOS E	0.0	0.0	0.82	0.82	
P4	West Full Crossing	5	63.6	LOS F	0.0	0.0	0.96	0.96	
All Pedestrians		10	55.2	LOS E			0.89	0.89	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2017 PM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 137 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	288	6.3	0.260	6.1	LOS A	1.3	9.8	0.13	0.59	53.6
2	T1	350	4.9	0.617	57.2	LOS E	12.2	86.9	0.94	0.77	30.9
Approach		638	5.5	0.617	34.1	LOS C	12.2	86.9	0.57	0.69	38.3
North: Adelaide St											
8	T1	178	2.8	0.064	0.9	LOS A	0.2	1.6	0.04	0.03	59.1
9	R2	566	4.9	0.556	6.2	LOS A	1.2	8.8	0.05	0.60	53.0
Approach		744	4.4	0.556	4.9	LOS A	1.2	8.8	0.05	0.47	54.4
West: William Bailey St (RT Stage 1)											
10	L2	577	2.4	0.391	8.1	LOS A	8.9	63.6	0.30	0.64	52.2
12	R2	202	6.9	0.606	60.3	LOS E	12.1	91.0	0.93	0.81	29.5
Approach		779	3.6	0.606	21.6	LOS B	12.1	91.0	0.46	0.69	43.6
All Vehicles		2161	4.4	0.617	19.6	LOS B	12.2	91.0	0.35	0.61	44.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	55.2	LOS E	0.0	0.0	0.90	0.90	
P4	West Full Crossing	5	51.7	LOS E	0.0	0.0	0.87	0.87	
All Pedestrians		10	53.5	LOS E			0.88	0.88	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2022 AM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 137 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	m		per veh	km/h	
South: Adelaide St												
1	L2	236	13.5	0.229	6.8	LOS A	1.8	15.6	0.19	0.60	52.9	
2	T1	166	7.3	0.573	66.8	LOS E	6.2	45.9	0.98	0.76	28.6	
Approach		402	10.9	0.573	31.6	LOS C	6.2	45.9	0.52	0.67	39.2	
North: Adelaide St												
8	T1	367	1.5	0.149	5.1	LOS A	2.1	14.8	0.19	0.16	55.4	
9	R2	606	3.4	0.615	8.6	LOS A	6.5	47.1	0.21	0.65	51.2	
Approach		972	2.7	0.615	7.3	LOS A	6.5	47.1	0.20	0.46	52.7	
West: William Bailey St (RT Stage 1)												
10	L2	342	7.1	0.226	6.6	LOS A	2.7	20.7	0.17	0.60	53.2	
12	R2	292	6.8	0.609	51.4	LOS D	15.9	123.5	0.87	0.82	31.8	
Approach		634	6.9	0.609	27.2	LOS B	15.9	123.5	0.49	0.70	40.7	
All Vehicles		2008	5.7	0.615	18.5	LOS B	15.9	123.5	0.36	0.58	45.3	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian ped	m		per ped	
P1	South Full Crossing	5	45.0	LOS E	0.0	0.0	0.81	0.81	
P4	West Full Crossing	5	61.7	LOS F	0.0	0.0	0.95	0.95	
All Pedestrians		10	53.3	LOS E			0.88	0.88	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2022 PM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 137 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	317	6.2	0.298	6.4	LOS A	1.9	14.5	0.18	0.60	53.5
2	T1	385	4.9	0.678	57.9	LOS E	13.6	97.4	0.95	0.79	30.7
Approach		702	5.5	0.678	34.7	LOS C	13.6	97.4	0.60	0.71	38.1
North: Adelaide St											
8	T1	196	2.8	0.071	0.9	LOS A	0.3	1.8	0.04	0.03	59.1
9	R2	623	4.9	0.619	7.0	LOS A	3.1	22.8	0.10	0.63	52.4
Approach		818	4.4	0.619	5.5	LOS A	3.1	22.8	0.09	0.49	53.9
West: William Bailey St (RT Stage 1)											
10	L2	634	2.4	0.433	9.0	LOS A	9.8	70.6	0.32	0.68	51.6
12	R2	222	6.9	0.668	61.1	LOS E	13.6	102.1	0.95	0.82	29.3
Approach		857	3.6	0.668	22.5	LOS B	13.6	102.1	0.49	0.71	43.2
All Vehicles		2377	4.4	0.678	20.3	LOS B	13.6	102.1	0.38	0.63	44.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	55.2	LOS E	0.0	0.0	0.90	0.90
P4	West Full Crossing	5	51.7	LOS E	0.0	0.0	0.87	0.87
All Pedestrians		10	53.5	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2027 AM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 138 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	257	13.6	0.260	7.4	LOS A	2.5	21.5	0.23	0.62	52.5
2	T1	181	7.3	0.630	67.9	LOS E	6.9	51.0	0.99	0.78	28.3
Approach		438	11.0	0.630	32.4	LOS C	6.9	51.0	0.55	0.69	38.9
North: Adelaide St											
8	T1	400	1.5	0.162	5.0	LOS A	2.3	16.1	0.19	0.16	55.4
9	R2	661	3.5	0.671	9.3	LOS A	8.9	64.9	0.26	0.67	50.7
Approach		1061	2.7	0.671	7.7	LOS A	8.9	64.9	0.23	0.48	52.4
West: William Bailey St (RT Stage 1)											
10	L2	373	7.1	0.248	6.7	LOS A	3.2	24.5	0.18	0.60	53.1
12	R2	318	6.8	0.668	52.9	LOS D	18.0	139.7	0.89	0.83	31.4
Approach		691	6.9	0.668	28.0	LOS B	18.0	139.7	0.51	0.70	40.3
All Vehicles		2190	5.7	0.671	19.0	LOS B	18.0	139.7	0.38	0.59	45.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	45.5	LOS E	0.0	0.0	0.81	0.81
P4	West Full Crossing	5	62.2	LOS F	0.0	0.0	0.95	0.95
All Pedestrians		10	53.8	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2027 PM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 137 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	346	6.2	0.340	6.9	LOS A	2.9	22.1	0.23	0.62	53.1
2	T1	420	4.9	0.741	59.1	LOS E	15.4	109.7	0.97	0.82	30.4
Approach		766	5.5	0.741	35.6	LOS C	15.4	109.7	0.63	0.73	37.7
North: Adelaide St											
8	T1	214	2.8	0.077	0.9	LOS A	0.3	2.0	0.04	0.03	59.1
9	R2	680	4.9	0.684	7.8	LOS A	5.5	40.3	0.16	0.66	51.8
Approach		894	4.4	0.684	6.1	LOS A	5.5	40.3	0.13	0.51	53.4
West: William Bailey St (RT Stage 1)											
10	L2	693	2.4	0.478	9.8	LOS A	10.9	78.1	0.35	0.70	51.0
12	R2	243	6.9	0.729	62.9	LOS E	15.3	115.3	0.97	0.85	19.7
Approach		936	3.6	0.729	23.6	LOS B	15.3	115.3	0.51	0.74	41.2
All Vehicles		2595	4.4	0.741	21.1	LOS B	15.4	115.3	0.42	0.66	43.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	55.2	LOS E	0.0	0.0	0.90	0.90
P4	West Full Crossing	5	51.7	LOS E	0.0	0.0	0.87	0.87
All Pedestrians		10	53.5	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\Base geometry\Adelaide St-William Bailey St (BASE).sip7

MOVEMENT SUMMARY

 **Site: TCS 4135 [2031 AM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 139 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	274	13.5	0.321	8.1	LOS A	3.3	27.6	0.29	0.64	52.0
2	T1	193	7.3	0.676	69.0	LOS E	7.5	55.4	0.99	0.79	28.1
Approach		467	11.0	0.676	33.3	LOS C	7.5	55.4	0.58	0.70	38.5
North: Adelaide St											
8	T1	426	1.5	0.172	5.0	LOS A	2.4	17.1	0.18	0.16	55.5
9	R2	705	3.4	0.715	10.8	LOS A	10.5	76.4	0.27	0.79	49.7
Approach		1132	2.7	0.715	8.6	LOS A	10.5	76.4	0.24	0.55	51.7
West: William Bailey St (RT Stage 1)											
10	L2	398	7.1	0.296	6.8	LOS A	3.4	26.3	0.20	0.61	53.1
12	R2	339	6.8	0.718	54.3	LOS D	19.9	154.3	0.92	0.84	31.0
Approach		737	6.9	0.718	28.6	LOS C	19.9	154.3	0.53	0.72	40.0
All Vehicles		2336	5.7	0.718	19.8	LOS B	19.9	154.3	0.40	0.63	44.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	45.9	LOS E	0.0	0.0	0.81	0.81
P4	West Full Crossing	5	62.7	LOS F	0.0	0.0	0.95	0.95
All Pedestrians		10	54.3	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2031 PM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 137 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	369	6.3	0.378	8.0	LOS A	4.6	34.8	0.31	0.65	52.3
2	T1	448	4.9	0.789	60.4	LOS E	16.8	120.3	0.98	0.85	30.1
Approach		817	5.5	0.789	36.7	LOS C	16.8	120.3	0.68	0.76	37.3
North: Adelaide St											
8	T1	227	2.8	0.082	0.9	LOS A	0.3	2.1	0.04	0.03	59.1
9	R2	725	5.0	0.736	9.1	LOS A	9.7	71.9	0.25	0.70	50.8
Approach		952	4.4	0.736	7.1	LOS A	9.7	71.9	0.20	0.54	52.6
West: William Bailey St (RT Stage 1)											
10	L2	739	2.4	0.513	10.6	LOS A	11.7	83.9	0.38	0.72	50.5
12	R2	259	6.9	0.778	64.8	LOS E	16.8	126.9	0.99	0.87	28.5
Approach		998	3.6	0.778	24.7	LOS B	16.8	126.9	0.54	0.76	42.1
All Vehicles		2767	4.5	0.789	22.2	LOS B	16.8	126.9	0.46	0.68	43.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	55.2	LOS E	0.0	0.0	0.90	0.90	
P4	West Full Crossing	5	51.7	LOS E	0.0	0.0	0.87	0.87	
All Pedestrians		10	53.5	LOS E			0.88	0.88	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2037 AM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 139 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	300	13.6	0.333	9.2	LOS A	4.7	40.0	0.34	0.66	51.2
2	T1	211	7.3	0.740	69.9	LOS E	8.4	61.7	1.00	0.82	27.9
Approach		511	11.0	0.740	34.3	LOS C	8.4	61.7	0.61	0.72	38.1
North: Adelaide St											
8	T1	466	1.5	0.188	5.0	LOS A	2.7	19.0	0.19	0.16	55.4
9	R2	772	3.4	0.788	10.6	LOS A	16.0	117.0	0.37	0.72	49.8
Approach		1238	2.7	0.788	8.5	LOS A	16.0	117.0	0.30	0.51	51.8
West: William Bailey St (RT Stage 1)											
10	L2	436	7.1	0.291	6.9	LOS A	4.1	32.0	0.19	0.60	52.9
12	R2	371	6.8	0.786	57.4	LOS E	23.2	179.9	0.95	0.87	30.2
Approach		807	6.9	0.786	30.2	LOS C	23.2	179.9	0.54	0.73	39.4
All Vehicles		2556	5.7	0.788	20.5	LOS B	23.2	179.9	0.44	0.62	44.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	45.9	LOS E	0.0	0.0	0.81	0.81
P4	West Full Crossing	5	62.7	LOS F	0.0	0.0	0.95	0.95
All Pedestrians		10	54.3	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: TCS 4135 [2037 PM_Base_Adelaide St-William Bailey St]**

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 123 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	403	6.3	0.489	12.1	LOS A	9.0	68.6	0.53	0.73	49.4
2	T1	490	4.9	0.810	54.2	LOS D	16.8	120.1	0.98	0.86	31.7
Approach		893	5.5	0.810	35.2	LOS C	16.8	120.1	0.78	0.80	37.9
North: Adelaide St											
8	T1	249	2.8	0.092	1.3	LOS A	0.5	3.2	0.07	0.05	58.7
9	R2	792	4.9	0.849	14.9	LOS B	21.3	157.5	0.51	0.89	47.1
Approach		1041	4.4	0.849	11.6	LOS A	21.3	157.5	0.41	0.69	49.4
West: William Bailey St (RT Stage 1)											
10	L2	808	2.4	0.665	10.5	LOS A	18.8	135.2	0.52	0.74	50.5
12	R2	283	6.9	0.825	61.3	LOS E	17.2	129.9	1.00	0.90	20.8
Approach		1090	3.6	0.825	23.7	LOS B	18.8	135.2	0.64	0.78	41.2
All Vehicles		3024	4.4	0.849	22.9	LOS B	21.3	157.5	0.60	0.76	42.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	50.1	LOS E	0.0	0.0	0.90	0.90	
P4	West Full Crossing	5	45.7	LOS E	0.0	0.0	0.86	0.86	
All Pedestrians		10	47.9	LOS E			0.88	0.88	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 1 [2017 AM_Base_Beaton Ave-Newline]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	38	44.7	0.048	0.1	LOS A	0.2	1.7	0.10	0.28	73.8	
3	R2	57	0.0	0.048	6.8	LOS A	0.2	1.7	0.16	0.42	54.9	
Approach		95	17.9	0.048	4.1	NA	0.2	1.7	0.13	0.37	61.2	
East: Beaton Ave												
4	L2	114	0.0	0.078	4.8	LOS A	0.3	2.3	0.15	0.50	53.7	
6	R2	5	0.0	0.078	5.2	LOS A	0.3	2.3	0.15	0.50	53.4	
Approach		119	0.0	0.078	4.8	LOS A	0.3	2.3	0.15	0.50	53.7	
North: Newline Rd												
7	L2	3	33.3	0.038	7.6	LOS A	0.0	0.0	0.00	0.03	61.1	
8	T1	56	25.0	0.038	0.0	LOS A	0.0	0.0	0.00	0.03	79.4	
Approach		59	25.4	0.038	0.4	NA	0.0	0.0	0.00	0.03	78.2	
All Vehicles		273	11.7	0.078	3.6	NA	0.3	2.3	0.11	0.35	60.4	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2017 PM_Base Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	38	0.0	0.019	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	200	0.5	0.115	6.7	LOS A	0.6	4.0	0.13	0.60	53.9	
Approach		238	0.4	0.115	5.7	NA	0.6	4.0	0.11	0.51	56.9	
East: Beaton Ave												
4	L2	132	0.0	0.089	4.7	LOS A	0.4	2.6	0.11	0.50	53.9	
6	R2	5	20.0	0.089	6.2	LOS A	0.4	2.6	0.11	0.50	49.1	
Approach		137	0.7	0.089	4.7	LOS A	0.4	2.6	0.11	0.50	53.7	
North: Newline Rd												
7	L2	6	0.0	0.023	6.9	LOS A	0.0	0.0	0.00	0.10	72.8	
8	T1	33	15.2	0.023	0.0	LOS A	0.0	0.0	0.00	0.10	77.9	
Approach		39	12.8	0.023	1.1	NA	0.0	0.0	0.00	0.10	77.1	
All Vehicles		414	1.7	0.115	4.9	NA	0.6	4.0	0.10	0.47	57.1	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2022 AM_Base Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	40	45.0	0.051	0.1	LOS A	0.2	1.8	0.11	0.28	73.9	
3	R2	61	1.6	0.051	6.8	LOS A	0.2	1.8	0.16	0.43	54.9	
Approach		101	18.8	0.051	4.2	NA	0.2	1.8	0.14	0.37	61.1	
East: Beaton Ave												
4	L2	125	0.0	0.086	4.8	LOS A	0.4	2.5	0.16	0.50	53.7	
6	R2	6	0.0	0.086	5.3	LOS A	0.4	2.5	0.16	0.50	53.4	
Approach		131	0.0	0.086	4.8	LOS A	0.4	2.5	0.16	0.50	53.7	
North: Newline Rd												
7	L2	3	32.3	0.040	7.6	LOS A	0.0	0.0	0.00	0.03	61.5	
8	T1	59	25.0	0.040	0.0	LOS A	0.0	0.0	0.00	0.03	79.4	
Approach		62	25.4	0.040	0.4	NA	0.0	0.0	0.00	0.03	78.3	
All Vehicles		293	11.8	0.086	3.7	NA	0.4	2.5	0.12	0.36	60.2	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2022 PM_Base_Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	34	0.0	0.017	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	210	0.5	0.121	6.8	LOS A	0.6	4.2	0.13	0.60	53.9	
Approach		244	0.4	0.121	5.8	NA	0.6	4.2	0.11	0.52	56.4	
East: Beaton Ave												
4	L2	145	0.0	0.098	4.7	LOS A	0.4	2.9	0.11	0.50	53.9	
6	R2	6	20.0	0.098	6.3	LOS A	0.4	2.9	0.11	0.50	49.1	
Approach		151	0.7	0.098	4.7	LOS A	0.4	2.9	0.11	0.50	53.7	
North: Newline Rd												
7	L2	6	0.0	0.024	6.9	LOS A	0.0	0.0	0.00	0.10	72.8	
8	T1	35	15.3	0.024	0.0	LOS A	0.0	0.0	0.00	0.10	77.9	
Approach		41	12.9	0.024	1.1	NA	0.0	0.0	0.00	0.10	77.1	
All Vehicles		435	1.7	0.121	5.0	NA	0.6	4.2	0.10	0.47	56.8	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2027 AM_Base_Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	42	44.7	0.051	0.1	LOS A	0.2	1.9	0.09	0.25	74.3
3	R2	63	0.0	0.051	6.8	LOS A	0.2	1.9	0.17	0.44	54.6
Approach		105	17.9	0.051	4.1	NA	0.2	1.9	0.14	0.37	61.1
East: Beaton Ave											
4	L2	137	0.0	0.094	4.8	LOS A	0.4	2.8	0.16	0.51	53.7
6	R2	6	0.0	0.094	5.3	LOS A	0.4	2.8	0.16	0.51	53.4
Approach		143	0.0	0.094	4.8	LOS A	0.4	2.8	0.16	0.51	53.7
North: Newline Rd											
7	L2	3	33.3	0.042	7.6	LOS A	0.0	0.0	0.00	0.03	61.1
8	T1	62	25.0	0.042	0.0	LOS A	0.0	0.0	0.00	0.03	79.4
Approach		65	25.4	0.042	0.4	NA	0.0	0.0	0.00	0.03	78.2
All Vehicles		312	11.3	0.094	3.7	NA	0.4	2.8	0.12	0.36	60.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2027 PM_Base_Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	42	0.0	0.021	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	220	0.5	0.127	6.8	LOS A	0.6	4.4	0.14	0.60	53.9	
Approach		262	0.4	0.127	5.7	NA	0.6	4.4	0.12	0.51	56.8	
East: Beaton Ave												
4	L2	158	0.0	0.107	4.7	LOS A	0.5	3.2	0.11	0.50	53.8	
6	R2	6	20.0	0.107	6.5	LOS A	0.5	3.2	0.11	0.50	49.1	
Approach		164	0.7	0.107	4.8	LOS A	0.5	3.2	0.11	0.50	53.6	
North: Newline Rd												
7	L2	7	0.0	0.025	6.9	LOS A	0.0	0.0	0.00	0.10	72.8	
8	T1	36	15.2	0.025	0.0	LOS A	0.0	0.0	0.00	0.10	77.9	
Approach		43	12.8	0.025	1.1	NA	0.0	0.0	0.00	0.10	77.1	
All Vehicles		469	1.7	0.127	4.9	NA	0.6	4.4	0.10	0.47	57.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2031 AM_Base_Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	43	44.8	0.054	0.1	LOS A	0.2	2.1	0.10	0.25	74.4
3	R2	66	1.7	0.054	6.9	LOS A	0.2	2.1	0.17	0.45	54.5
Approach		109	18.7	0.054	4.2	NA	0.2	2.1	0.14	0.37	61.0
East: Beaton Ave											
4	L2	146	0.0	0.101	4.8	LOS A	0.4	3.0	0.17	0.51	53.7
6	R2	6	0.0	0.101	5.4	LOS A	0.4	3.0	0.17	0.51	53.3
Approach		152	0.0	0.101	4.8	LOS A	0.4	3.0	0.17	0.51	53.7
North: Newline Rd											
7	L2	3	33.1	0.044	7.6	LOS A	0.0	0.0	0.00	0.03	61.2
8	T1	64	25.0	0.044	0.0	LOS A	0.0	0.0	0.00	0.03	79.4
Approach		67	25.4	0.044	0.4	NA	0.0	0.0	0.00	0.03	78.2
All Vehicles		329	11.4	0.101	3.7	NA	0.4	3.0	0.12	0.36	59.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2031 PM_Base Ave-Beaton-Newline]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	43	0.0	0.022	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	228	0.5	0.132	6.8	LOS A	0.7	4.6	0.14	0.60	53.9	
Approach		271	0.4	0.132	5.7	NA	0.7	4.6	0.12	0.50	56.8	
East: Beaton Ave												
4	L2	169	0.0	0.114	4.7	LOS A	0.5	3.5	0.12	0.51	53.8	
6	R2	6	20.0	0.114	6.5	LOS A	0.5	3.5	0.12	0.51	49.1	
Approach		175	0.7	0.114	4.8	LOS A	0.5	3.5	0.12	0.51	53.6	
North: Newline Rd												
7	L2	7	0.0	0.026	6.9	LOS A	0.0	0.0	0.00	0.10	72.8	
8	T1	38	15.2	0.026	0.0	LOS A	0.0	0.0	0.00	0.10	77.9	
Approach		44	12.8	0.026	1.1	NA	0.0	0.0	0.00	0.10	77.1	
All Vehicles		491	1.7	0.132	4.9	NA	0.7	4.6	0.11	0.47	57.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2037 AM_Base_Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	46	44.7	0.057	0.1	LOS A	0.3	2.2	0.10	0.25	74.4
3	R2	70	1.7	0.057	6.9	LOS A	0.3	2.2	0.18	0.45	54.5
Approach		115	18.8	0.057	4.2	NA	0.3	2.2	0.15	0.37	61.0
East: Beaton Ave											
4	L2	160	0.0	0.111	4.8	LOS A	0.5	3.3	0.17	0.51	53.7
6	R2	7	0.0	0.111	5.4	LOS A	0.5	3.3	0.17	0.51	53.3
Approach		167	0.0	0.111	4.8	LOS A	0.5	3.3	0.17	0.51	53.6
North: Newline Rd											
7	L2	4	33.3	0.046	7.6	LOS A	0.0	0.0	0.00	0.03	61.1
8	T1	67	25.0	0.046	0.0	LOS A	0.0	0.0	0.00	0.03	79.4
Approach		71	25.4	0.046	0.4	NA	0.0	0.0	0.00	0.03	78.2
All Vehicles		353	11.2	0.111	3.7	NA	0.5	3.3	0.13	0.37	59.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2037 PM_Base_Beaton Ave-Newline]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	46	0.0	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	240	0.5	0.140	6.8	LOS A	0.7	4.9	0.15	0.60	53.8	
Approach		286	0.4	0.140	5.7	NA	0.7	4.9	0.12	0.50	56.8	
East: Beaton Ave												
4	L2	187	1.3	0.128	4.7	LOS A	0.6	4.0	0.12	0.51	53.5	
6	R2	7	20.0	0.128	6.7	LOS A	0.6	4.0	0.12	0.51	49.1	
Approach		194	1.9	0.128	4.8	LOS A	0.6	4.0	0.12	0.51	53.3	
North: Newline Rd												
7	L2	7	0.0	0.028	6.9	LOS A	0.0	0.0	0.00	0.10	72.8	
8	T1	40	15.2	0.028	0.0	LOS A	0.0	0.0	0.00	0.10	77.9	
Approach		47	12.8	0.028	1.1	NA	0.0	0.0	0.00	0.10	77.1	
All Vehicles		527	2.1	0.140	5.0	NA	0.7	4.9	0.11	0.47	56.8	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2017 AM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	12	8.3	0.010	0.4	LOS A	0.0	0.3	0.06	0.26	92.4	
3	R2	6	16.7	0.010	7.9	LOS A	0.0	0.3	0.06	0.26	70.1	
Approach		18	11.1	0.010	2.9	NA	0.0	0.3	0.06	0.26	83.5	
East: Six Mile Rd												
4	L2	12	8.3	0.009	7.2	LOS A	0.0	0.3	0.09	0.60	68.1	
6	R2	2	0.0	0.009	6.8	LOS A	0.0	0.3	0.09	0.60	68.5	
Approach		14	7.1	0.009	7.1	LOS A	0.0	0.3	0.09	0.60	68.2	
North: Newline Rd												
7	L2	2	50.0	0.015	8.9	LOS A	0.0	0.0	0.00	0.06	72.9	
8	T1	25	4.0	0.015	0.1	LOS A	0.0	0.0	0.00	0.06	97.6	
Approach		27	7.4	0.015	0.7	NA	0.0	0.0	0.00	0.06	95.2	
All Vehicles		59	8.5	0.015	2.9	NA	0.0	0.3	0.04	0.25	83.8	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2017 PM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	57	12.3	0.039	0.6	LOS A	0.1	0.5	0.03	0.19	93.7	
3	R2	10	0.0	0.039	7.4	LOS A	0.1	0.5	0.03	0.19	78.0	
Approach		67	10.4	0.039	1.7	NA	0.1	0.5	0.03	0.19	91.0	
East: Six Mile Rd												
4	L2	5	0.0	0.005	7.0	LOS A	0.0	0.1	0.10	0.60	69.5	
6	R2	2	0.0	0.005	7.0	LOS A	0.0	0.1	0.10	0.60	69.1	
Approach		7	0.0	0.005	7.0	LOS A	0.0	0.1	0.10	0.60	69.4	
North: Newline Rd												
7	L2	2	0.0	0.018	7.8	LOS A	0.0	0.0	0.00	0.05	87.2	
8	T1	30	10.0	0.018	0.1	LOS A	0.0	0.0	0.00	0.05	97.9	
Approach		32	9.4	0.018	0.6	NA	0.0	0.0	0.00	0.05	97.2	
All Vehicles		106	9.4	0.039	1.7	NA	0.1	0.5	0.03	0.17	90.9	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2022 AM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	13	8.7	0.011	0.4	LOS A	0.0	0.3	0.07	0.26	92.3	
3	R2	6	17.2	0.011	7.9	LOS A	0.0	0.3	0.07	0.26	69.9	
Approach		19	11.5	0.011	2.9	NA	0.0	0.3	0.07	0.26	83.3	
East: Six Mile Rd												
4	L2	13	8.3	0.010	7.2	LOS A	0.0	0.3	0.09	0.59	68.1	
6	R2	2	0.0	0.010	6.8	LOS A	0.0	0.3	0.09	0.59	68.5	
Approach		15	7.1	0.010	7.1	LOS A	0.0	0.3	0.09	0.59	68.2	
North: Newline Rd												
7	L2	2	52.4	0.015	9.0	LOS A	0.0	0.0	0.00	0.06	72.3	
8	T1	26	4.2	0.015	0.1	LOS A	0.0	0.0	0.00	0.06	97.6	
Approach		28	7.7	0.015	0.7	NA	0.0	0.0	0.00	0.06	95.1	
All Vehicles		63	8.7	0.015	3.0	NA	0.0	0.3	0.04	0.25	83.5	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2022 PM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	60	12.4	0.041	0.7	LOS A	0.1	0.5	0.03	0.19	93.7	
3	R2	11	0.0	0.041	7.4	LOS A	0.1	0.5	0.03	0.19	78.0	
Approach		70	10.5	0.041	1.7	NA	0.1	0.5	0.03	0.19	91.0	
East: Six Mile Rd												
4	L2	6	0.0	0.005	7.0	LOS A	0.0	0.1	0.10	0.60	69.5	
6	R2	2	0.0	0.005	7.0	LOS A	0.0	0.1	0.10	0.60	69.1	
Approach		8	0.0	0.005	7.0	LOS A	0.0	0.1	0.10	0.60	69.4	
North: Newline Rd												
7	L2	2	0.0	0.019	7.8	LOS A	0.0	0.0	0.00	0.05	87.2	
8	T1	32	10.1	0.019	0.1	LOS A	0.0	0.0	0.00	0.05	97.9	
Approach		34	9.5	0.019	0.6	NA	0.0	0.0	0.00	0.05	97.2	
All Vehicles		112	9.5	0.041	1.7	NA	0.1	0.5	0.03	0.18	90.8	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2027 AM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	13	8.3	0.011	0.4	LOS A	0.0	0.3	0.07	0.26	92.4	
3	R2	7	16.7	0.011	7.9	LOS A	0.0	0.3	0.07	0.26	70.1	
Approach		20	11.1	0.011	2.9	NA	0.0	0.3	0.07	0.26	83.5	
East: Six Mile Rd												
4	L2	14	8.3	0.011	7.2	LOS A	0.0	0.3	0.09	0.59	68.1	
6	R2	2	0.0	0.011	6.8	LOS A	0.0	0.3	0.09	0.59	68.5	
Approach		17	7.1	0.011	7.1	LOS A	0.0	0.3	0.09	0.59	68.2	
North: Newline Rd												
7	L2	2	52.4	0.016	9.0	LOS A	0.0	0.0	0.00	0.06	72.3	
8	T1	28	4.0	0.016	0.1	LOS A	0.0	0.0	0.00	0.06	97.7	
Approach		30	7.4	0.016	0.7	NA	0.0	0.0	0.00	0.06	95.3	
All Vehicles		66	8.5	0.016	3.0	NA	0.0	0.3	0.04	0.25	83.4	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2027 PM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	63	12.3	0.043	0.6	LOS A	0.1	0.5	0.04	0.19	93.7	
3	R2	11	0.0	0.043	7.5	LOS A	0.1	0.5	0.04	0.19	78.0	
Approach		74	10.4	0.043	1.7	NA	0.1	0.5	0.04	0.19	91.0	
East: Six Mile Rd												
4	L2	6	0.0	0.006	7.0	LOS A	0.0	0.2	0.10	0.60	69.5	
6	R2	2	0.0	0.006	7.0	LOS A	0.0	0.2	0.10	0.60	69.1	
Approach		8	0.0	0.006	7.0	LOS A	0.0	0.2	0.10	0.60	69.4	
North: Newline Rd												
7	L2	2	0.0	0.020	7.8	LOS A	0.0	0.0	0.00	0.05	87.2	
8	T1	33	10.0	0.020	0.1	LOS A	0.0	0.0	0.00	0.05	97.9	
Approach		35	9.4	0.020	0.6	NA	0.0	0.0	0.00	0.05	97.2	
All Vehicles		117	9.4	0.043	1.7	NA	0.1	0.5	0.03	0.18	90.7	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2031 AM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	14	8.1	0.012	0.4	LOS A	0.0	0.3	0.07	0.26	92.2	
3	R2	7	17.4	0.012	7.9	LOS A	0.0	0.3	0.07	0.26	69.9	
Approach		21	11.2	0.012	2.9	NA	0.0	0.3	0.07	0.26	83.3	
East: Six Mile Rd												
4	L2	15	8.4	0.012	7.2	LOS A	0.0	0.3	0.10	0.59	68.1	
6	R2	3	0.0	0.012	6.8	LOS A	0.0	0.3	0.10	0.59	68.5	
Approach		18	7.2	0.012	7.1	LOS A	0.0	0.3	0.10	0.59	68.2	
North: Newline Rd												
7	L2	2	54.5	0.017	9.0	LOS A	0.0	0.0	0.00	0.06	71.8	
8	T1	29	4.2	0.017	0.1	LOS A	0.0	0.0	0.00	0.06	97.6	
Approach		31	7.8	0.017	0.7	NA	0.0	0.0	0.00	0.06	95.2	
All Vehicles		69	8.7	0.017	3.0	NA	0.0	0.3	0.05	0.26	83.1	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2031 PM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Newline Rd												
2	T1	65	12.3	0.045	0.6	LOS A	0.1	0.5	0.04	0.19	93.7	
3	R2	11	0.0	0.045	7.5	LOS A	0.1	0.5	0.04	0.19	78.0	
Approach		76	10.5	0.045	1.7	NA	0.1	0.5	0.04	0.19	91.0	
East: Six Mile Rd												
4	L2	6	0.0	0.006	7.0	LOS A	0.0	0.2	0.10	0.60	69.5	
6	R2	3	0.0	0.006	7.0	LOS A	0.0	0.2	0.10	0.60	69.0	
Approach		9	0.0	0.006	7.0	LOS A	0.0	0.2	0.10	0.60	69.3	
North: Newline Rd												
7	L2	2	0.0	0.021	7.8	LOS A	0.0	0.0	0.00	0.06	87.2	
8	T1	34	10.2	0.021	0.1	LOS A	0.0	0.0	0.00	0.06	97.9	
Approach		37	9.6	0.021	0.6	NA	0.0	0.0	0.00	0.06	97.2	
All Vehicles		122	9.4	0.045	1.7	NA	0.1	0.5	0.03	0.18	90.6	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2037 AM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	14	8.3	0.013	0.4	LOS A	0.0	0.3	0.07	0.26	92.3	
3	R2	7	16.7	0.013	7.9	LOS A	0.0	0.3	0.07	0.26	70.1	
Approach		22	11.1	0.013	2.9	NA	0.0	0.3	0.07	0.26	83.5	
East: Six Mile Rd												
4	L2	17	8.3	0.013	7.2	LOS A	0.1	0.4	0.10	0.59	68.1	
6	R2	3	0.0	0.013	6.8	LOS A	0.1	0.4	0.10	0.59	68.5	
Approach		20	7.1	0.013	7.1	LOS A	0.1	0.4	0.10	0.59	68.2	
North: Newline Rd												
7	L2	2	54.5	0.017	9.0	LOS A	0.0	0.0	0.00	0.06	71.9	
8	T1	30	4.0	0.017	0.1	LOS A	0.0	0.0	0.00	0.06	97.7	
Approach		32	7.5	0.017	0.7	NA	0.0	0.0	0.00	0.06	95.4	
All Vehicles		73	8.4	0.017	3.1	NA	0.1	0.4	0.05	0.26	83.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2037 PM_Base Six Mile Road-Newline]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	68	12.3	0.047	0.6	LOS A	0.1	0.6	0.04	0.19	93.7	
3	R2	12	0.0	0.047	7.5	LOS A	0.1	0.6	0.04	0.19	78.0	
Approach		80	10.4	0.047	1.7	NA	0.1	0.6	0.04	0.19	90.9	
East: Six Mile Rd												
4	L2	7	0.0	0.007	7.0	LOS A	0.0	0.2	0.11	0.60	69.5	
6	R2	3	0.0	0.007	7.0	LOS A	0.0	0.2	0.11	0.60	69.0	
Approach		10	0.0	0.007	7.0	LOS A	0.0	0.2	0.11	0.60	69.3	
North: Newline Rd												
7	L2	2	0.0	0.021	7.8	LOS A	0.0	0.0	0.00	0.05	87.2	
8	T1	36	10.0	0.021	0.1	LOS A	0.0	0.0	0.00	0.05	97.9	
Approach		38	9.4	0.021	0.6	NA	0.0	0.0	0.00	0.05	97.2	
All Vehicles		129	9.3	0.047	1.7	NA	0.1	0.6	0.03	0.18	90.5	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1v [2017 AM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	3	0.0	0.002	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	576	13.0	0.171	0.2	LOS A	0.0	0.0	0.00	0.03	101.3
Approach		579	13.0	0.171	0.2	NA	0.0	0.0	0.00	0.03	101.2
North: Pacific Hwy											
8	T1	753	14.3	0.226	0.2	LOS A	0.0	0.0	0.00	0.03	100.7
9	R2	1	0.0	0.001	10.9	LOS A	0.0	0.0	0.52	0.62	68.2
Approach		754	14.3	0.226	0.2	NA	0.0	0.0	0.00	0.03	100.7
NorthWest: Median (RT Stage 2)											
29a	R1	3	0.0	0.007	5.8	LOS A	0.0	0.1	0.63	0.50	61.5
Approach		3	0.0	0.007	5.8	LOS A	0.0	0.1	0.63	0.50	61.5
West: Six Mile Rd (RT Stage 1)											
10	L2	1	0.0	0.002	10.5	LOS A	0.0	0.0	0.52	0.63	67.0
12	R2	3	0.0	0.006	11.9	LOS A	0.0	0.2	0.59	0.69	29.1
Approach		4	0.0	0.006	11.5	LOS A	0.0	0.2	0.58	0.68	33.9
All Vehicles		1340	13.7	0.226	0.3	NA	0.0	0.2	0.00	0.03	100.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1v [2017 PM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	794	14.6	0.243	0.3	LOS A	0.0	0.0	0.00	0.04	100.0
Approach		795	14.6	0.243	0.3	NA	0.0	0.0	0.00	0.04	99.9
North: Pacific Hwy											
8	T1	603	10.1	0.172	0.1	LOS A	0.0	0.0	0.00	0.02	108.7
9	R2	2	50.0	0.006	18.2	LOS B	0.0	0.2	0.70	0.77	49.4
Approach		605	10.2	0.172	0.2	NA	0.0	0.2	0.00	0.02	108.3
NorthWest: Median (RT Stage 2)											
29a	R1	3	0.0	0.005	3.9	LOS A	0.0	0.1	0.53	0.38	65.7
Approach		3	0.0	0.005	3.9	LOS A	0.0	0.1	0.53	0.38	65.7
West: Six Mile Rd (RT Stage 1)											
10	L2	2	0.0	0.005	13.2	LOS A	0.0	0.1	0.64	0.73	63.9
12	R2	3	0.0	0.010	16.4	LOS B	0.0	0.2	0.73	0.79	28.1
Approach		5	0.0	0.010	15.1	LOS B	0.0	0.2	0.69	0.77	36.3
All Vehicles		1408	12.6	0.243	0.3	NA	0.0	0.2	0.00	0.04	102.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1v [2022 AM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	4	0.0	0.002	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	663	13.0	0.197	0.2	LOS A	0.0	0.0	0.00	0.03	101.3
Approach		667	13.0	0.197	0.2	NA	0.0	0.0	0.00	0.03	101.2
North: Pacific Hwy											
8	T1	867	14.3	0.260	0.2	LOS A	0.0	0.0	0.00	0.03	100.7
9	R2	1	0.0	0.002	11.6	LOS A	0.0	0.0	0.55	0.65	67.4
Approach		869	14.3	0.260	0.2	NA	0.0	0.0	0.00	0.03	100.6
NorthWest: Median (RT Stage 2)											
29a	R1	3	0.0	0.009	7.7	LOS A	0.0	0.2	0.69	0.60	58.0
Approach		3	0.0	0.009	7.7	LOS A	0.0	0.2	0.69	0.60	58.0
West: Six Mile Rd (RT Stage 1)											
10	L2	1	0.0	0.002	11.4	LOS A	0.0	0.0	0.56	0.66	65.9
12	R2	3	0.0	0.008	13.4	LOS A	0.0	0.2	0.65	0.73	28.8
Approach		4	0.0	0.008	12.9	LOS A	0.0	0.2	0.63	0.71	33.5
All Vehicles		1543	13.7	0.260	0.3	NA	0.0	0.2	0.00	0.03	100.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1v [2022 PM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	915	14.6	0.280	0.3	LOS A	0.0	0.0	0.00	0.04	99.9
Approach		916	14.6	0.280	0.3	NA	0.0	0.0	0.00	0.04	99.9
North: Pacific Hwy											
8	T1	694	10.1	0.198	0.1	LOS A	0.0	0.0	0.00	0.02	108.7
9	R2	1	0.0	0.003	14.3	LOS A	0.0	0.1	0.68	0.71	64.2
Approach		696	10.1	0.198	0.2	NA	0.0	0.1	0.00	0.02	108.5
NorthWest: Median (RT Stage 2)											
29a	R1	3	0.0	0.006	4.9	LOS A	0.0	0.1	0.58	0.44	63.4
Approach		3	0.0	0.006	4.9	LOS A	0.0	0.1	0.58	0.44	63.4
West: Six Mile Rd (RT Stage 1)											
10	L2	2	0.0	0.006	15.1	LOS B	0.0	0.1	0.71	0.78	61.8
12	R2	3	0.0	0.014	20.0	LOS B	0.0	0.3	0.79	0.86	27.3
Approach		6	0.0	0.014	18.1	LOS B	0.0	0.3	0.76	0.83	35.2
All Vehicles		1620	12.6	0.280	0.3	NA	0.0	0.3	0.00	0.04	102.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1v [2027 AM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	4	0.0	0.002	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	751	13.0	0.222	0.2	LOS A	0.0	0.0	0.00	0.03	101.3
Approach		754	12.9	0.222	0.2	NA	0.0	0.0	0.00	0.03	101.2
North: Pacific Hwy											
8	T1	981	14.3	0.294	0.2	LOS A	0.0	0.0	0.00	0.03	100.6
9	R2	1	0.0	0.002	12.4	LOS A	0.0	0.1	0.58	0.67	66.4
Approach		982	14.3	0.294	0.3	NA	0.0	0.1	0.00	0.03	100.6
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.012	10.0	LOS A	0.0	0.2	0.75	0.69	54.1
Approach		4	0.0	0.012	10.0	LOS A	0.0	0.2	0.75	0.69	54.1
West: Six Mile Rd (RT Stage 1)											
10	L2	1	0.0	0.002	12.5	LOS A	0.0	0.1	0.62	0.68	64.7
12	R2	4	0.0	0.011	15.3	LOS B	0.0	0.3	0.70	0.78	28.4
Approach		5	0.0	0.011	14.6	LOS B	0.0	0.3	0.68	0.76	32.7
All Vehicles		1745	13.7	0.294	0.3	NA	0.0	0.3	0.00	0.03	100.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1v [2027 PM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	1034	14.6	0.316	0.3	LOS A	0.0	0.0	0.00	0.04	99.9
Approach		1035	14.6	0.316	0.3	NA	0.0	0.0	0.00	0.04	99.8
North: Pacific Hwy											
8	T1	785	10.1	0.224	0.1	LOS A	0.0	0.0	0.00	0.02	108.6
9	R2	1	0.0	0.003	16.0	LOS B	0.0	0.1	0.73	0.75	62.4
Approach		787	10.1	0.224	0.2	NA	0.0	0.1	0.00	0.02	108.5
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.008	6.1	LOS A	0.0	0.2	0.64	0.53	60.9
Approach		4	0.0	0.008	6.1	LOS A	0.0	0.2	0.64	0.53	60.9
West: Six Mile Rd (RT Stage 1)											
10	L2	2	0.0	0.008	17.6	LOS B	0.0	0.2	0.76	0.84	59.3
12	R2	4	0.0	0.019	24.8	LOS B	0.1	0.4	0.84	0.94	26.4
Approach		6	0.0	0.019	21.9	LOS B	0.1	0.4	0.81	0.90	34.0
All Vehicles		1832	12.6	0.316	0.3	NA	0.1	0.4	0.00	0.04	102.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1v [2032 AM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	4	0.0	0.002	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	820	13.0	0.243	0.2	LOS A	0.0	0.0	0.00	0.03	101.3
Approach		824	12.9	0.243	0.2	NA	0.0	0.0	0.00	0.03	101.1
North: Pacific Hwy											
8	T1	1072	14.3	0.322	0.2	LOS A	0.0	0.0	0.00	0.03	100.6
9	R2	1	0.0	0.003	13.1	LOS A	0.0	0.1	0.62	0.69	65.6
Approach		1073	14.3	0.322	0.3	NA	0.0	0.1	0.00	0.03	100.6
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.015	12.3	LOS A	0.0	0.3	0.79	0.77	50.7
Approach		4	0.0	0.015	12.3	LOS A	0.0	0.3	0.79	0.77	50.7
West: Six Mile Rd (RT Stage 1)											
10	L2	1	0.0	0.003	13.4	LOS A	0.0	0.1	0.66	0.71	63.6
12	R2	4	0.0	0.013	17.0	LOS B	0.0	0.3	0.74	0.82	28.0
Approach		5	0.0	0.013	16.1	LOS B	0.0	0.3	0.72	0.79	32.7
All Vehicles		1906	13.7	0.322	0.3	NA	0.0	0.3	0.00	0.03	100.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1v [2032 PM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	1130	14.6	0.346	0.3	LOS A	0.0	0.0	0.00	0.04	99.8
Approach		1131	14.6	0.346	0.3	NA	0.0	0.0	0.00	0.04	99.8
North: Pacific Hwy											
8	T1	859	10.1	0.245	0.1	LOS A	0.0	0.0	0.00	0.02	108.6
9	R2	1	0.0	0.004	17.7	LOS B	0.0	0.1	0.77	0.79	60.6
Approach		860	10.1	0.245	0.2	NA	0.0	0.1	0.00	0.02	108.5
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.010	7.2	LOS A	0.0	0.2	0.68	0.59	58.8
Approach		4	0.0	0.010	7.2	LOS A	0.0	0.2	0.68	0.59	58.8
West: Six Mile Rd (RT Stage 1)											
10	L2	3	0.0	0.011	20.1	LOS B	0.0	0.2	0.80	0.89	57.0
12	R2	4	0.0	0.026	29.8	LOS C	0.1	0.6	0.87	0.95	25.5
Approach		6	0.0	0.026	25.9	LOS B	0.1	0.6	0.84	0.93	32.9
All Vehicles		2002	12.6	0.346	0.4	NA	0.1	0.6	0.00	0.04	102.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1v [2037 AM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	5	0.0	0.003	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	924	13.0	0.274	0.2	LOS A	0.0	0.0	0.00	0.03	101.3
Approach		929	12.9	0.274	0.2	NA	0.0	0.0	0.00	0.03	101.1
North: Pacific Hwy											
8	T1	1209	14.3	0.363	0.3	LOS A	0.0	0.0	0.00	0.03	100.6
9	R2	2	0.0	0.003	14.3	LOS A	0.0	0.1	0.68	0.73	64.2
Approach		1211	14.3	0.363	0.3	NA	0.0	0.1	0.00	0.03	100.5
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.022	16.9	LOS B	0.1	0.4	0.84	0.84	45.1
Approach		4	0.0	0.022	16.9	LOS B	0.1	0.4	0.84	0.84	45.1
West: Six Mile Rd (RT Stage 1)											
10	L2	1	0.0	0.004	15.1	LOS B	0.0	0.1	0.71	0.76	61.8
12	R2	4	0.0	0.018	20.3	LOS B	0.1	0.4	0.79	0.88	27.3
Approach		6	0.0	0.018	19.0	LOS B	0.1	0.4	0.77	0.85	31.7
All Vehicles		2150	13.6	0.363	0.3	NA	0.1	0.4	0.00	0.03	100.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1v [2037 PM_Base_Six Mile-Pacific Hwy]

Six Mile-Pacific Hwy
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	2	0.0	0.001	8.2	LOS A	0.0	0.0	0.00	0.67	79.7
2	T1	1275	14.6	0.390	0.3	LOS A	0.0	0.0	0.00	0.04	99.8
Approach		1277	14.6	0.390	0.3	NA	0.0	0.0	0.00	0.04	99.7
North: Pacific Hwy											
8	T1	968	10.1	0.276	0.2	LOS A	0.0	0.0	0.00	0.02	108.6
9	R2	2	0.0	0.006	21.0	LOS B	0.0	0.1	0.82	0.85	57.4
Approach		969	10.1	0.276	0.2	NA	0.0	0.1	0.00	0.02	108.4
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.013	9.3	LOS A	0.0	0.2	0.74	0.68	55.2
Approach		4	0.0	0.013	9.3	LOS A	0.0	0.2	0.74	0.68	55.2
West: Six Mile Rd (RT Stage 1)											
10	L2	3	0.0	0.016	25.1	LOS B	0.0	0.3	0.85	0.95	52.9
12	R2	4	0.0	0.040	40.4	LOS C	0.1	0.9	0.91	0.97	23.7
Approach		7	0.0	0.040	34.3	LOS C	0.1	0.9	0.89	0.96	30.5
All Vehicles		2257	12.6	0.390	0.4	NA	0.1	0.9	0.00	0.04	102.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2017 AM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	23	4.3	0.012	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	20	85.0	0.017	8.7	LOS A	0.1	1.1	0.14	0.59	52.0	
Approach		43	41.9	0.017	4.1	NA	0.1	1.1	0.06	0.28	63.9	
East: Waste Process Centre (Access)												
4	L2	24	83.3	0.022	5.6	LOS A	0.1	1.4	0.13	0.49	38.9	
6	R2	1	0.0	0.022	4.9	LOS A	0.1	1.4	0.13	0.49	53.5	
Approach		25	80.0	0.022	5.6	LOS A	0.1	1.4	0.13	0.49	39.3	
North: Newline Rd												
7	L2	1	0.0	0.019	6.9	LOS A	0.0	0.0	0.00	0.02	74.4	
8	T1	36	0.0	0.019	0.0	LOS A	0.0	0.0	0.00	0.02	79.7	
Approach		37	0.0	0.019	0.2	NA	0.0	0.0	0.00	0.02	79.5	
All Vehicles		105	36.2	0.022	3.1	NA	0.1	1.4	0.06	0.24	59.1	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2017 PM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Newline Rd											
2	T1	44	2.3	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
3	R2	10	70.0	0.008	8.5	LOS A	0.0	0.5	0.16	0.59	52.1
Approach		54	14.8	0.023	1.6	NA	0.0	0.5	0.03	0.11	72.7
East: Waste Process Centre (Access)											
4	L2	28	35.7	0.022	5.1	LOS A	0.1	1.0	0.14	0.49	46.0
6	R2	1	0.0	0.022	4.9	LOS A	0.1	1.0	0.14	0.49	53.4
Approach		29	34.5	0.022	5.1	LOS A	0.1	1.0	0.14	0.49	46.2
North: Newline Rd											
7	L2	2	50.0	0.027	7.9	LOS A	0.0	0.0	0.00	0.03	57.1
8	T1	45	13.3	0.027	0.0	LOS A	0.0	0.0	0.00	0.03	79.7
Approach		47	14.9	0.027	0.3	NA	0.0	0.0	0.00	0.03	78.4
All Vehicles		130	19.2	0.027	1.9	NA	0.1	1.0	0.04	0.16	66.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\Base geometry\Waste Processing Centre-Newline Rd (BASE).sip7

MOVEMENT SUMMARY

▽ Site: 1 [2022 AM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	24	4.2	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	21	85.8	0.018	8.8	LOS A	0.1	1.2	0.14	0.59	51.9	
Approach		45	42.5	0.018	4.1	NA	0.1	1.2	0.07	0.28	63.8	
East: Waste Process Centre (Access)												
4	L2	26	83.3	0.025	5.6	LOS A	0.1	1.5	0.13	0.49	38.9	
6	R2	1	0.0	0.025	4.9	LOS A	0.1	1.5	0.13	0.49	53.5	
Approach		27	80.3	0.025	5.6	LOS A	0.1	1.5	0.13	0.49	39.2	
North: Newline Rd												
7	L2	1	0.0	0.020	6.9	LOS A	0.0	0.0	0.00	0.02	74.4	
8	T1	38	0.0	0.020	0.0	LOS A	0.0	0.0	0.00	0.02	79.7	
Approach		39	0.0	0.020	0.2	NA	0.0	0.0	0.00	0.02	79.5	
All Vehicles		111	37.0	0.025	3.1	NA	0.1	1.5	0.06	0.24	58.8	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2022 PM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	46	2.4	0.024	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
3	R2	11	69.8	0.008	8.6	LOS A	0.0	0.6	0.16	0.59	52.1
Approach		57	14.9	0.024	1.6	NA	0.0	0.6	0.03	0.11	72.7
East: Waste Process Centre (Access)											
4	L2	31	35.5	0.024	5.1	LOS A	0.1	1.1	0.14	0.49	46.0
6	R2	1	0.0	0.024	5.0	LOS A	0.1	1.1	0.14	0.49	53.4
Approach		32	34.3	0.024	5.1	LOS A	0.1	1.1	0.14	0.49	46.2
North: Newline Rd											
7	L2	2	47.6	0.028	7.8	LOS A	0.0	0.0	0.00	0.03	57.8
8	T1	47	13.3	0.028	0.0	LOS A	0.0	0.0	0.00	0.03	79.7
Approach		49	14.8	0.028	0.3	NA	0.0	0.0	0.00	0.03	78.4
All Vehicles		138	19.4	0.028	2.0	NA	0.1	1.1	0.04	0.17	65.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2027 AM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	25	4.3	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	22	85.0	0.018	8.8	LOS A	0.1	1.2	0.14	0.59	51.9	
Approach		47	41.9	0.018	4.1	NA	0.1	1.2	0.07	0.28	63.9	
East: Waste Process Centre (Access)												
4	L2	30	83.9	0.028	5.6	LOS A	0.1	1.7	0.13	0.49	38.8	
6	R2	1	0.0	0.028	4.9	LOS A	0.1	1.7	0.13	0.49	53.5	
Approach		31	81.2	0.028	5.6	LOS A	0.1	1.7	0.13	0.49	39.1	
North: Newline Rd												
7	L2	1	0.0	0.021	6.9	LOS A	0.0	0.0	0.00	0.02	74.4	
8	T1	40	0.0	0.021	0.0	LOS A	0.0	0.0	0.00	0.02	79.7	
Approach		41	0.0	0.021	0.2	NA	0.0	0.0	0.00	0.02	79.6	
All Vehicles		119	37.7	0.028	3.1	NA	0.1	1.7	0.06	0.24	58.2	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2031 AM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	26	4.6	0.014	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
3	R2	23	85.1	0.019	8.8	LOS A	0.1	1.2	0.15	0.59	51.9
Approach		49	42.0	0.019	4.1	NA	0.1	1.2	0.07	0.27	63.9
East: Waste Process Centre (Access)											
4	L2	31	83.4	0.029	5.6	LOS A	0.1	1.8	0.14	0.49	38.8
6	R2	1	0.0	0.029	4.9	LOS A	0.1	1.8	0.14	0.49	53.4
Approach		32	80.8	0.029	5.6	LOS A	0.1	1.8	0.14	0.49	39.2
North: Newline Rd											
7	L2	1	0.0	0.022	6.9	LOS A	0.0	0.0	0.00	0.02	74.4
8	T1	41	0.0	0.022	0.0	LOS A	0.0	0.0	0.00	0.02	79.7
Approach		42	0.0	0.022	0.2	NA	0.0	0.0	0.00	0.02	79.6
All Vehicles		123	37.6	0.029	3.1	NA	0.1	1.8	0.06	0.24	58.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2031 PM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	50	2.4	0.026	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	11	70.2	0.009	8.6	LOS A	0.0	0.6	0.17	0.58	52.0	
Approach		62	14.9	0.026	1.6	NA	0.0	0.6	0.03	0.11	72.7	
East: Waste Process Centre (Access)												
4	L2	36	35.8	0.028	5.2	LOS A	0.1	1.3	0.15	0.49	46.0	
6	R2	1	0.0	0.028	5.0	LOS A	0.1	1.3	0.15	0.49	53.4	
Approach		37	34.5	0.028	5.2	LOS A	0.1	1.3	0.15	0.49	46.2	
North: Newline Rd												
7	L2	1	0.0	0.029	6.9	LOS A	0.0	0.0	0.00	0.01	74.4	
8	T1	51	13.3	0.029	0.0	LOS A	0.0	0.0	0.00	0.01	79.7	
Approach		52	13.0	0.029	0.1	NA	0.0	0.0	0.00	0.01	79.6	
All Vehicles		151	19.1	0.029	2.0	NA	0.1	1.3	0.05	0.17	65.4	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [2037 AM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	28	4.3	0.015	0.0	LOS A	0.0	0.0	0.00	0.00	80.0	
3	R2	24	85.0	0.020	8.8	LOS A	0.1	1.3	0.15	0.59	51.9	
Approach		52	41.9	0.020	4.1	NA	0.1	1.3	0.07	0.27	63.9	
East: Waste Process Centre (Access)												
4	L2	34	83.3	0.031	5.6	LOS A	0.1	1.9	0.14	0.49	38.8	
6	R2	1	0.0	0.031	4.9	LOS A	0.1	1.9	0.14	0.49	53.4	
Approach		35	80.9	0.031	5.6	LOS A	0.1	1.9	0.14	0.49	39.1	
North: Newline Rd												
7	L2	1	0.0	0.023	6.9	LOS A	0.0	0.0	0.00	0.01	74.4	
8	T1	43	0.0	0.023	0.0	LOS A	0.0	0.0	0.00	0.01	79.7	
Approach		44	0.0	0.023	0.2	NA	0.0	0.0	0.00	0.01	79.6	
All Vehicles		130	38.0	0.031	3.2	NA	0.1	1.9	0.07	0.24	58.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2037 PM Base Waste Processing Centre-Newline]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Newline Rd											
2	T1	53	2.3	0.027	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
3	R2	12	70.0	0.010	8.6	LOS A	0.0	0.6	0.17	0.58	52.0
Approach		65	14.8	0.027	1.6	NA	0.0	0.6	0.03	0.11	72.7
East: Waste Process Centre (Access)											
4	L2	39	35.7	0.031	5.2	LOS A	0.1	1.4	0.15	0.49	45.9
6	R2	1	0.0	0.031	5.0	LOS A	0.1	1.4	0.15	0.49	53.4
Approach		41	34.5	0.031	5.2	LOS A	0.1	1.4	0.15	0.49	46.2
North: Newline Rd											
7	L2	1	0.0	0.031	6.9	LOS A	0.0	0.0	0.00	0.01	74.4
8	T1	54	13.3	0.031	0.0	LOS A	0.0	0.0	0.00	0.01	79.7
Approach		55	13.0	0.031	0.2	NA	0.0	0.0	0.00	0.01	79.6
All Vehicles		161	19.2	0.031	2.0	NA	0.1	1.4	0.05	0.17	65.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

No Interchange SIDRA Results

MOVEMENT SUMMARY

 **Site: 1 [AM William Bailey-Newline - 2022 with Development]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	140	4.3	0.203	7.8	LOS A	1.2	9.0	0.75	0.78	52.7
2	T1	50	4.0	0.191	7.3	LOS A	1.2	9.1	0.75	0.78	51.9
3	R2	103	3.9	0.191	12.2	LOS A	1.2	9.1	0.75	0.78	51.9
Approach		293	4.1	0.203	9.3	LOS A	1.2	9.1	0.75	0.78	52.3
East: William Bailey St											
4	L2	268	3.4	0.366	7.9	LOS A	2.1	14.8	0.69	0.79	52.6
5	T1	529	5.1	0.653	10.0	LOS A	6.6	50.7	0.83	0.94	52.1
6	R2	98	16.3	0.653	15.4	LOS B	6.6	50.7	0.83	0.94	51.7
Approach		895	5.8	0.653	10.0	LOS A	6.6	50.7	0.79	0.90	52.2
North: Newline Rd											
7	L2	245	4.5	0.687	13.6	LOS A	5.9	43.2	0.88	1.09	48.3
8	T1	140	0.0	0.687	13.6	LOS A	5.9	43.2	0.88	1.09	49.6
9	R2	64	4.7	0.687	18.8	LOS B	5.9	43.2	0.88	1.09	49.5
Approach		449	3.1	0.687	14.3	LOS A	5.9	43.2	0.88	1.09	48.9
West: Seahman Road											
10	L2	29	0.0	0.228	5.9	LOS A	1.1	8.2	0.46	0.57	53.6
11	T1	468	6.4	0.561	5.7	LOS A	4.2	30.8	0.54	0.62	53.7
12	R2	383	1.8	0.561	10.4	LOS A	4.2	30.8	0.57	0.63	53.2
Approach		880	4.2	0.561	7.7	LOS A	4.2	30.8	0.55	0.62	53.5
All Vehicles		2517	4.6	0.687	9.9	LOS A	6.6	50.7	0.72	0.82	52.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [AM William Bailey-Newline - 2027 with Development]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	152	3.9	0.323	10.2	LOS A	2.2	16.1	0.91	0.93	50.9
2	T1	82	2.9	0.339	9.4	LOS A	2.6	19.0	0.94	0.91	50.9
3	R2	113	4.3	0.339	14.4	LOS A	2.6	19.0	0.94	0.91	50.9
Approach		347	3.8	0.339	11.4	LOS A	2.6	19.0	0.93	0.92	50.9
East: William Bailey St											
4	L2	292	3.3	0.448	9.2	LOS A	2.9	21.0	0.76	0.88	51.6
5	T1	577	5.2	0.899	21.9	LOS B	19.6	149.2	1.00	1.42	44.4
6	R2	243	7.4	0.899	27.0	LOS B	19.6	149.2	1.00	1.42	44.3
Approach		1112	5.2	0.899	19.7	LOS B	19.6	149.2	0.94	1.28	46.0
North: Newline Rd											
7	L2	807	1.5	2.146	2073.6	LOS F	824.5	5888.2	1.00	20.86	1.7
8	T1	257	0.0	2.146	2073.8	LOS F	824.5	5888.2	1.00	20.86	1.7
9	R2	150	2.2	2.146	2078.9	LOS F	824.5	5888.2	1.00	20.86	1.7
Approach		1214	1.3	2.146	2074.3	LOS F	824.5	5888.2	1.00	20.86	1.7
West: Seahman Road											
10	L2	53	0.0	0.299	7.3	LOS A	1.5	11.6	0.62	0.72	52.9
11	T1	511	6.6	0.735	9.0	LOS A	8.8	65.4	0.79	0.87	51.9
12	R2	418	1.7	0.735	14.4	LOS A	8.8	65.4	0.85	0.93	51.2
Approach		981	4.2	0.735	11.2	LOS A	8.8	65.4	0.81	0.89	51.7
All Vehicles		3655	3.5	2.146	699.3	LOS F	824.5	5888.2	0.92	7.65	4.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [AM William Bailey-Newline - 2032 with Development]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	165	3.9	0.387	11.9	LOS A	2.8	20.4	0.95	0.99	49.7
2	T1	97	2.7	0.418	11.2	LOS A	3.5	25.1	0.99	0.98	50.0
3	R2	122	4.3	0.418	16.2	LOS B	3.5	25.1	0.99	0.98	49.9
Approach		385	3.7	0.418	13.1	LOS A	3.5	25.1	0.98	0.99	49.9
East: William Bailey St											
4	L2	316	3.3	0.511	10.1	LOS A	3.7	26.7	0.81	0.95	51.0
5	T1	625	5.2	1.053	129.5	LOS F	90.9	689.5	1.00	4.05	19.5
6	R2	305	6.4	1.053	134.5	LOS F	90.9	689.5	1.00	4.05	19.5
Approach		1246	5.0	1.053	100.5	LOS F	90.9	689.5	0.95	3.26	23.1
North: Newline Rd											
7	L2	1040	1.2	3.108	3803.4	LOS F	1317.7	9379.8	1.00	23.33	1.0
8	T1	308	0.0	3.108	3803.6	LOS F	1317.7	9379.8	1.00	23.33	1.0
9	R2	187	1.9	3.108	3808.6	LOS F	1317.7	9379.8	1.00	23.33	1.0
Approach		1534	1.1	3.108	3804.1	LOS F	1317.7	9379.8	1.00	23.33	1.0
West: Seahman Road											
10	L2	63	0.0	0.347	8.0	LOS A	1.9	13.9	0.68	0.78	52.5
11	T1	554	6.6	0.852	13.1	LOS A	14.9	110.2	0.91	1.07	49.2
12	R2	452	1.7	0.852	19.7	LOS B	14.9	110.2	1.00	1.18	47.8
Approach		1069	4.1	0.852	15.6	LOS B	14.9	110.2	0.94	1.10	48.7
All Vehicles		4234	3.2	3.108	1412.9	LOS F	1317.7	9379.8	0.97	9.78	2.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [AM William Bailey-Newline - 2037 with Development]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	178	3.9	0.407	11.9	LOS A	3.0	21.7	0.95	1.00	49.7
2	T1	122	2.3	0.466	11.7	LOS A	4.0	29.4	1.00	1.01	49.7
3	R2	132	4.3	0.466	16.8	LOS B	4.0	29.4	1.00	1.01	49.7
Approach		432	3.6	0.466	13.4	LOS A	4.0	29.4	0.98	1.01	49.7
East: William Bailey St											
4	L2	340	3.3	0.580	11.6	LOS A	4.6	33.3	0.86	1.00	49.9
5	T1	673	5.2	1.250	467.1	LOS F	292.5	2205.6	1.00	10.32	7.1
6	R2	415	5.1	1.250	472.0	LOS F	292.5	2205.6	1.00	10.32	7.1
Approach		1428	4.7	1.250	360.0	LOS F	292.5	2205.6	0.97	8.10	8.9
North: Newline Rd											
7	L2	1463	0.9	4.693	6652.6	LOS F	2098.6	14876.1	1.00	24.78	0.5
8	T1	397	0.0	4.693	6652.9	LOS F	2098.6	14876.1	1.00	24.78	0.5
9	R2	252	1.4	4.693	6657.8	LOS F	2098.6	14876.1	1.00	24.78	0.5
Approach		2111	0.8	4.693	6653.3	LOS F	2098.6	14876.1	1.00	24.78	0.5
West: Seahman Road											
10	L2	81	0.0	0.403	9.2	LOS A	2.4	17.6	0.73	0.86	51.6
11	T1	596	6.6	0.990	42.2	LOS C	46.6	344.9	0.93	1.95	35.6
12	R2	487	1.7	0.990	58.0	LOS E	46.6	344.9	1.00	2.32	32.2
Approach		1165	4.1	0.990	46.5	LOS D	46.6	344.9	0.95	2.03	34.8
All Vehicles		5135	2.9	4.693	2846.6	LOS F	2098.6	14876.1	0.98	12.98	1.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [PM William Bailey-Newline - 2022 with Development]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	349	3.2	0.817	30.8	LOS C	10.4	74.9	1.00	1.31	39.6
2	T1	177	1.2	1.008	105.8	LOS F	43.1	308.3	1.00	2.62	22.2
3	R2	364	3.0	1.008	110.8	LOS F	43.1	308.3	1.00	2.62	22.2
3u	U	3	0.0	1.008	112.9	LOS F	43.1	308.3	1.00	2.62	22.4
Approach		893	2.7	1.008	78.6	LOS F	43.1	308.3	1.00	2.11	26.6
East: William Bailey St											
4	L2	252	2.6	0.363	7.3	LOS A	2.0	14.4	0.64	0.75	53.1
5	T1	644	6.2	0.837	12.2	LOS A	13.7	101.9	0.97	1.05	50.1
6	R2	257	1.7	0.837	17.0	LOS B	13.7	101.9	0.97	1.05	50.2
Approach		1152	4.4	0.837	12.2	LOS A	13.7	101.9	0.89	0.98	50.7
North: Newline Rd											
7	L2	91	15.1	0.495	13.5	LOS A	3.4	26.6	0.89	1.01	48.4
8	T1	118	1.8	0.495	13.0	LOS A	3.4	26.6	0.89	1.01	49.9
9	R2	34	12.6	0.495	18.6	LOS B	3.4	26.6	0.89	1.01	49.6
Approach		243	8.3	0.495	14.0	LOS A	3.4	26.6	0.89	1.01	49.3
West: Seahman Road											
10	L2	88	5.0	0.364	11.1	LOS A	2.2	15.7	0.82	0.91	49.2
11	T1	461	4.3	0.894	26.6	LOS B	18.8	137.9	0.97	1.44	41.9
12	R2	271	3.3	0.894	34.6	LOS C	18.8	137.9	1.00	1.55	40.4
12u	U	1	0.0	0.894	36.7	LOS C	18.8	137.9	1.00	1.55	41.1
Approach		820	4.0	0.894	27.6	LOS B	18.8	137.9	0.96	1.42	42.0
All Vehicles		3108	4.1	1.008	35.5	LOS C	43.1	308.3	0.94	1.42	38.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [PM William Bailey-Newline - 2027 with Development]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	380	3.2	1.104	245.7	LOS F	60.3	433.5	1.00	3.80	11.9
2	T1	308	0.8	1.512	945.0	LOS F	314.9	2242.9	1.00	11.13	3.7
3	R2	397	3.0	1.512	950.1	LOS F	314.9	2242.9	1.00	11.13	3.7
3u	U	4	0.0	1.512	952.2	LOS F	314.9	2242.9	1.00	11.13	3.7
Approach		1089	2.4	1.512	702.6	LOS F	314.9	2242.9	1.00	8.57	4.9
East: William Bailey St											
4	L2	205	3.5	0.488	8.4	LOS A	3.1	22.7	0.68	0.80	52.2
5	T1	743	6.0	1.267	411.1	LOS F	407.4	2947.3	0.95	9.77	7.9
6	R2	845	0.3	1.267	497.4	LOS F	407.4	2947.3	1.00	11.58	6.8
Approach		1793	3.0	1.267	405.7	LOS F	407.4	2947.3	0.94	9.60	8.1
North: Newline Rd											
7	L2	241	5.9	0.682	13.1	LOS A	6.3	46.9	0.91	1.09	48.6
8	T1	152	1.4	0.682	13.2	LOS A	6.3	46.9	0.91	1.09	49.9
9	R2	58	7.6	0.682	18.4	LOS B	6.3	46.9	0.91	1.09	49.8
Approach		451	4.6	0.682	13.8	LOS A	6.3	46.9	0.91	1.09	49.2
West: Seahman Road											
10	L2	175	2.7	0.634	28.6	LOS C	5.5	39.6	0.99	1.17	40.6
11	T1	510	4.2	1.558	972.4	LOS F	366.3	2673.1	1.00	11.17	3.6
12	R2	295	3.3	1.558	1038.1	LOS F	366.3	2673.1	1.00	11.81	3.4
12u	U	1	0.0	1.558	1040.2	LOS F	366.3	2673.1	1.00	11.81	3.4
Approach		981	3.7	1.558	824.1	LOS F	366.3	2673.1	1.00	9.58	4.2
All Vehicles		4314	3.2	1.558	534.8	LOS F	407.4	2947.3	0.96	8.45	6.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [PM William Bailey-Newline - 2032 with Development]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	412	3.2	1.189	384.0	LOS F	95.6	687.2	1.00	5.17	8.2
2	T1	357	0.7	1.679	1242.2	LOS F	415.6	2958.3	1.00	13.02	2.9
3	R2	430	3.0	1.679	1247.2	LOS F	415.6	2958.3	1.00	13.02	2.9
3u	U	4	0.0	1.679	1249.3	LOS F	415.6	2958.3	1.00	13.02	2.9
Approach		1204	2.4	1.679	950.2	LOS F	415.6	2958.3	1.00	10.33	3.7
East: William Bailey St											
4	L2	299	2.6	0.577	9.6	LOS A	4.4	31.6	0.74	0.88	51.3
5	T1	761	6.2	1.501	805.2	LOS F	735.4	5320.8	0.97	15.67	4.3
6	R2	1044	0.5	1.501	915.6	LOS F	735.4	5320.8	1.00	17.64	3.9
Approach		2104	2.8	1.501	746.9	LOS F	735.4	5320.8	0.95	14.55	4.7
North: Newline Rd											
7	L2	289	5.2	0.769	15.4	LOS B	8.6	63.6	0.95	1.18	47.2
8	T1	167	1.4	0.769	15.5	LOS B	8.6	63.6	0.95	1.18	48.4
9	R2	66	7.1	0.769	20.8	LOS B	8.6	63.6	0.95	1.18	48.3
Approach		522	4.2	0.769	16.1	LOS B	8.6	63.6	0.95	1.18	47.7
West: Seahman Road											
10	L2	207	2.5	0.740	39.6	LOS C	7.5	54.0	1.00	1.29	36.1
11	T1	553	4.2	1.819	1444.0	LOS F	499.4	3645.3	1.00	13.36	2.5
12	R2	320	3.3	1.819	1503.7	LOS F	499.4	3645.3	1.00	13.83	2.4
12u	U	1	0.0	1.819	1505.7	LOS F	499.4	3645.3	1.00	13.83	2.4
Approach		1081	3.6	1.819	1192.4	LOS F	499.4	3645.3	1.00	11.18	3.0
All Vehicles		4910	3.0	1.819	817.1	LOS F	735.4	5320.8	0.97	11.35	4.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [PM William Bailey-Newline - 2037 with Development]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	444	3.2	1.629	1162.9	LOS F	226.7	1630.1	1.00	8.64	3.0
2	T1	454	0.6	2.426	2585.3	LOS F	695.4	4944.0	1.00	15.35	1.4
3	R2	463	3.0	2.426	2590.3	LOS F	695.4	4944.0	1.00	15.35	1.4
3u	U	4	0.0	2.426	2592.4	LOS F	695.4	4944.0	1.00	15.35	1.4
Approach		1365	2.3	2.426	2124.5	LOS F	695.4	4944.0	1.00	13.17	1.7
East: William Bailey St											
4	L2	239	3.5	0.499	6.5	LOS A	3.3	23.9	0.62	0.67	53.1
5	T1	867	6.0	1.296	455.1	LOS F	505.7	3661.6	0.94	9.32	7.3
6	R2	949	0.3	1.296	546.6	LOS F	505.7	3661.6	1.00	10.99	6.2
Approach		2055	3.1	1.296	445.1	LOS F	505.7	3661.6	0.93	9.08	7.4
North: Newline Rd											
7	L2	259	1.4	0.690	13.3	LOS A	7.1	51.4	0.94	1.11	48.6
8	T1	148	0.0	0.690	13.5	LOS A	7.1	51.4	0.94	1.11	49.8
9	R2	61	7.8	0.690	18.8	LOS B	7.1	51.4	0.94	1.11	49.6
Approach		469	1.8	0.690	14.0	LOS A	7.1	51.4	0.94	1.11	49.1
West: Seahman Road											
10	L2	275	2.0	0.754	34.7	LOS C	8.3	59.8	1.00	1.29	38.0
11	T1	596	4.5	1.320	612.0	LOS F	213.6	1591.8	1.00	8.45	5.5
12	R2	44	25.2	1.320	617.9	LOS F	213.6	1591.8	1.00	8.45	5.5
12u	U	1	0.0	1.320	618.9	LOS F	213.6	1591.8	1.00	8.45	5.6
Approach		917	4.7	1.320	439.1	LOS F	213.6	1591.8	1.00	6.30	7.4
All Vehicles		4806	3.0	2.426	878.9	LOS F	695.4	4944.0	0.96	8.94	4.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2022 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Average Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	266	11.7	0.264	11.5	LOS A	4.0	33.1	0.32	0.70	57.9
2	T1	166	7.2	0.648	70.4	LOS E	6.4	48.4	0.99	0.78	32.9
Approach		432	10.0	0.648	34.1	LOS C	6.4	48.4	0.58	0.73	44.9
North: Adelaide St											
8	T1	366	1.4	0.168	10.1	LOS A	3.5	24.5	0.30	0.25	72.1
9	R2	611	3.4	0.714	16.8	LOS B	16.8	122.3	0.51	0.78	52.8
Approach		977	2.7	0.714	14.3	LOS A	16.8	122.3	0.43	0.58	58.7
West: William Bailey St (RT Stage 1)											
10	L2	362	6.6	0.246	8.9	LOS A	2.9	22.3	0.17	0.67	67.0
12	R2	469	4.3	0.777	48.7	LOS D	27.1	202.7	0.90	0.87	22.9
Approach		831	5.3	0.777	31.4	LOS C	27.1	202.7	0.58	0.78	32.2
All Vehicles		2240	5.0	0.777	24.4	LOS B	27.1	202.7	0.51	0.68	43.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	37.9	LOS D	0.0	0.0	0.74	0.74
P4	West Full Crossing	5	64.1	LOS F	0.0	0.0	0.96	0.96
All Pedestrians		10	51.0	LOS E			0.85	0.85

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2027 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	m		per veh	km/h
South: Adelaide St											
1	L2	377	9.2	0.438	17.4	LOS B	8.3	66.3	0.64	0.78	53.1
2	T1	181	7.3	0.507	47.0	LOS D	4.8	36.1	0.96	0.75	41.7
Approach		558	8.6	0.507	27.0	LOS B	8.3	66.3	0.74	0.77	48.8
North: Adelaide St											
8	T1	400	1.5	0.230	15.0	LOS B	4.5	31.7	0.49	0.41	65.7
9	R2	661	3.4	1.086	187.0	LOS F	73.7	537.7	1.00	1.35	14.1
Approach		1061	2.7	1.086	122.2	LOS F	73.7	537.7	0.81	1.00	20.0
West: William Bailey St (RT Stage 1)											
10	L2	449	5.9	0.335	9.2	LOS A	3.4	26.2	0.25	0.69	66.9
12	R2	999	2.2	1.299	585.6	LOS F	247.2	1791.2	1.00	2.19	5.2
Approach		1448	3.3	1.299	406.9	LOS F	247.2	1791.2	0.77	1.73	7.3
All Vehicles		3066	4.1	1.299	239.3	LOS F	247.2	1791.2	0.78	1.30	11.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian ped	m		per ped	
P1	South Full Crossing	5	23.8	LOS C	0.0	0.0	0.69	0.69	
P4	West Full Crossing	5	44.2	LOS E	0.0	0.0	0.94	0.94	
All Pedestrians		10	34.0	LOS D			0.82	0.82	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2032 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	m		per veh	km/h	
South: Adelaide St												
1	L2	430	8.6	0.482	16.8	LOS B	9.4	74.2	0.63	0.78	53.5	
2	T1	193	7.3	0.541	47.2	LOS D	5.1	38.8	0.96	0.75	41.6	
Approach		624	8.2	0.541	26.2	LOS B	9.4	74.2	0.74	0.77	49.2	
North: Adelaide St												
8	T1	426	1.5	0.257	16.8	LOS B	5.2	36.6	0.53	0.45	63.7	
9	R2	705	3.4	1.240	456.9	LOS F	141.6	1033.0	1.00	1.89	6.9	
Approach		1132	2.7	1.240	291.1	LOS F	141.6	1033.0	0.82	1.34	10.4	
West: William Bailey St (RT Stage 1)												
10	L2	497	5.7	0.370	9.2	LOS A	4.0	30.4	0.27	0.70	66.9	
12	R2	1228	1.9	1.518	974.9	LOS F	412.9	2977.7	1.00	2.78	3.3	
Approach		1724	3.0	1.518	696.8	LOS F	412.9	2977.7	0.79	2.18	4.6	
All Vehicles		3479	3.8	1.518	444.7	LOS F	412.9	2977.7	0.79	1.66	7.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian ped	m		per ped	
P1	South Full Crossing	5	22.4	LOS C	0.0	0.0	0.67	0.67	
P4	West Full Crossing	5	44.2	LOS E	0.0	0.0	0.94	0.94	
All Pedestrians		10	33.3	LOS D			0.81	0.81	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2037 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	523	7.8	0.563	16.8	LOS B	12.0	94.1	0.66	0.80	53.5
2	T1	211	7.3	0.591	47.6	LOS D	5.6	42.9	0.97	0.77	41.4
Approach		734	7.6	0.591	25.7	LOS B	12.0	94.1	0.75	0.79	49.4
North: Adelaide St											
8	T1	466	1.5	0.287	17.8	LOS B	5.9	42.0	0.56	0.47	62.5
9	R2	771	3.4	1.418	774.1	LOS F	217.6	1587.3	1.00	2.35	4.3
Approach		1238	2.7	1.418	489.2	LOS F	217.6	1587.3	0.83	1.64	6.6
West: William Bailey St (RT Stage 1)											
10	L2	576	5.3	0.429	9.5	LOS A	5.5	41.2	0.30	0.71	66.6
12	R2	1638	1.5	1.970	1786.4	LOS F	750.8	5386.2	1.00	3.59	1.9
Approach		2214	2.5	1.970	1324.1	LOS F	750.8	5386.2	0.82	2.84	2.6
All Vehicles		4185	3.5	1.970	849.5	LOS F	750.8	5386.2	0.81	2.13	3.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	21.8	LOS C	0.0	0.0	0.66	0.66	
P4	West Full Crossing	5	44.2	LOS E	0.0	0.0	0.94	0.94	
All Pedestrians		10	33.0	LOS D			0.80	0.80	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2022 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	449	4.4	0.427	9.9	LOS A	5.2	38.9	0.29	0.71	59.7
2	T1	385	4.9	0.731	61.4	LOS E	14.1	103.8	0.97	0.81	35.8
Approach		834	4.6	0.731	33.6	LOS C	14.1	103.8	0.60	0.76	45.7
North: Adelaide St											
8	T1	196	2.8	0.073	1.8	LOS A	0.5	3.3	0.08	0.06	86.2
9	R2	643	4.8	0.667	11.0	LOS A	7.7	56.6	0.23	0.73	57.6
Approach		839	4.3	0.667	8.8	LOS A	7.7	56.6	0.20	0.57	62.5
West: William Bailey St (RT Stage 1)											
10	L2	647	2.4	0.438	11.5	LOS A	9.8	69.6	0.32	0.73	65.2
12	R2	269	5.7	0.717	62.8	LOS E	16.8	125.1	0.95	0.84	21.0
Approach		916	3.4	0.717	26.6	LOS B	16.8	125.1	0.51	0.76	40.4
All Vehicles		2589	4.1	0.731	23.1	LOS B	16.8	125.1	0.44	0.70	47.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	53.2	LOS E	0.0	0.0	0.87	0.87	
P4	West Full Crossing	5	54.0	LOS E	0.0	0.0	0.88	0.88	
All Pedestrians		10	53.6	LOS E			0.88	0.88	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2027 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	853	2.5	1.001	111.5	LOS F	91.4	661.4	1.00	1.13	21.4
2	T1	420	4.9	0.923	73.4	LOS F	18.3	134.6	1.00	0.93	32.0
Approach		1273	3.3	1.001	99.0	LOS F	91.4	661.4	1.00	1.06	24.0
North: Adelaide St											
8	T1	214	2.8	0.086	4.2	LOS A	1.0	7.3	0.15	0.12	81.6
9	R2	759	4.4	0.859	22.9	LOS B	31.1	228.2	0.67	0.92	48.5
Approach		973	4.1	0.859	18.8	LOS B	31.1	228.2	0.56	0.75	53.3
West: William Bailey St (RT Stage 1)											
10	L2	720	2.3	0.558	11.9	LOS A	15.1	108.0	0.41	0.75	64.5
12	R2	423	4.0	0.898	71.5	LOS F	31.0	226.7	1.00	0.93	20.0
Approach		1142	2.9	0.898	34.0	LOS C	31.0	226.7	0.63	0.81	35.5
All Vehicles		3388	3.4	1.001	54.0	LOS D	91.4	661.4	0.75	0.89	32.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	47.2	LOS E	0.0	0.0	0.82	0.82
P4	West Full Crossing	5	56.7	LOS E	0.0	0.0	0.90	0.90
All Pedestrians		10	52.0	LOS E			0.86	0.86

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2032 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 75 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	994	2.3	1.117	261.3	LOS F	131.2	946.9	1.00	1.90	11.4
2	T1	448	4.9	0.911	41.3	LOS C	11.0	80.9	0.99	0.94	44.6
Approach		1442	3.1	1.117	193.0	LOS F	131.2	946.9	1.00	1.60	14.8
North: Adelaide St											
8	T1	228	2.8	0.099	3.9	LOS A	0.9	6.4	0.23	0.19	82.1
9	R2	823	4.4	1.104	219.0	LOS F	95.1	698.0	1.00	1.59	13.2
Approach		1051	4.0	1.104	172.4	LOS F	95.1	698.0	0.83	1.29	16.1
West: William Bailey St (RT Stage 1)											
10	L2	771	2.3	0.567	12.0	LOS A	8.9	63.7	0.47	0.78	64.5
12	R2	481	3.7	1.122	272.2	LOS F	65.6	477.9	1.00	1.77	9.4
Approach		1252	2.9	1.122	111.9	LOS F	65.6	477.9	0.68	1.16	20.0
All Vehicles		3745	3.3	1.122	160.1	LOS F	131.2	946.9	0.84	1.37	16.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	31.7	LOS D	0.0	0.0	0.92	0.92	
P4	West Full Crossing	5	31.7	LOS D	0.0	0.0	0.92	0.92	
All Pedestrians		10	31.7	LOS D			0.92	0.92	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2037 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 70 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Average Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	1295	1.9	1.392	742.5	LOS F	344.5	2474.3	1.00	3.43	4.6
2	T1	490	4.9	0.930	40.4	LOS C	11.8	87.1	0.99	0.97	45.1
Approach		1785	2.7	1.392	549.8	LOS F	344.5	2474.3	1.00	2.76	6.1
North: Adelaide St											
8	T1	249	2.8	0.114	4.7	LOS A	1.1	7.9	0.28	0.22	80.7
9	R2	933	4.2	1.343	640.7	LOS F	223.5	1636.9	1.00	2.78	5.2
Approach		1182	3.9	1.343	506.7	LOS F	223.5	1636.9	0.85	2.24	6.5
West: William Bailey St (RT Stage 1)											
10	L2	851	2.3	0.629	12.1	LOS A	9.7	69.6	0.52	0.79	64.5
12	R2	600	3.3	1.299	579.5	LOS F	137.4	996.3	1.00	2.70	5.2
Approach		1451	2.7	1.299	246.5	LOS F	137.4	996.3	0.72	1.58	11.4
All Vehicles		4418	3.0	1.392	438.7	LOS F	344.5	2474.3	0.87	2.23	7.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91	
P4	West Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91	
All Pedestrians		10	29.3	LOS C			0.91	0.91	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2022 with Development]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	107	16.8	0.090	0.6	LOS A	0.4	3.0	0.24	0.21	74.7	
3	R2	61	1.6	0.090	7.9	LOS A	0.4	3.0	0.35	0.31	55.8	
Approach		168	11.3	0.090	3.2	NA	0.4	3.0	0.28	0.25	66.5	
East: Beaton Ave												
4	L2	125	0.0	0.111	5.8	LOS A	0.4	3.1	0.40	0.60	52.9	
6	R2	6	0.0	0.111	7.2	LOS A	0.4	3.1	0.40	0.60	52.6	
Approach		131	0.0	0.111	5.8	LOS A	0.4	3.1	0.40	0.60	52.9	
North: Newline Rd												
7	L2	3	33.3	0.181	7.7	LOS A	0.0	0.0	0.00	0.01	61.4	
8	T1	324	4.3	0.181	0.0	LOS A	0.0	0.0	0.00	0.01	79.9	
Approach		327	4.6	0.181	0.1	NA	0.0	0.0	0.00	0.01	79.6	
All Vehicles		626	5.4	0.181	2.1	NA	0.4	3.1	0.16	0.20	68.7	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2027 with Development]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	297	6.3	0.273	4.9	LOS A	2.1	15.3	0.42	0.15	69.9
3	R2	64	1.7	0.273	18.4	LOS B	2.1	15.3	0.68	0.24	51.2
Approach		361	5.5	0.273	7.3	NA	2.1	15.3	0.47	0.17	65.6
East: Beaton Ave											
4	L2	137	0.0	0.402	16.5	LOS B	1.6	11.1	0.85	1.01	45.7
6	R2	6	0.0	0.402	29.5	LOS C	1.6	11.1	0.85	1.01	45.5
Approach		143	0.0	0.402	17.1	LOS B	1.6	11.1	0.85	1.01	45.7
North: Newline Rd											
7	L2	3	33.3	0.572	7.7	LOS A	0.0	0.0	0.00	0.00	61.2
8	T1	1083	1.4	0.572	0.1	LOS A	0.0	0.0	0.00	0.00	79.6
Approach		1087	1.5	0.572	0.1	NA	0.0	0.0	0.00	0.00	79.5
All Vehicles		1590	2.3	0.572	3.3	NA	2.1	15.3	0.18	0.13	71.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2032 with Development]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	377	5.2	0.561	13.8	LOS A	5.8	42.6	0.38	0.13	60.2
3	R2	66	1.7	0.561	46.4	LOS D	5.8	42.6	1.00	0.35	36.4
Approach		443	4.6	0.561	18.6	NA	5.8	42.6	0.47	0.17	54.8
East: Beaton Ave											
4	L2	146	0.0	1.093	170.2	LOS F	14.1	99.0	1.00	2.21	15.4
6	R2	6	0.0	1.093	204.0	LOS F	14.1	99.0	1.00	2.21	15.4
Approach		152	0.0	1.093	171.6	LOS F	14.1	99.0	1.00	2.21	15.4
North: Newline Rd											
7	L2	3	32.4	0.734	7.8	LOS A	0.0	0.0	0.00	0.00	61.3
8	T1	1397	1.1	0.734	0.2	LOS A	0.0	0.0	0.00	0.00	79.2
Approach		1400	1.2	0.734	0.2	NA	0.0	0.0	0.00	0.00	79.1
All Vehicles		1995	1.9	1.093	17.4	NA	14.1	99.0	0.18	0.21	55.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2037 with Development]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Newline Rd											
2	T1	521	3.9	1.137	17.2	LOS B	13.2	94.9	0.08	0.08	57.4
3	R2	70	1.7	1.137	226.6	LOS F	13.2	94.9	1.00	0.98	12.5
Approach		590	3.7	1.137	41.8	NA	13.2	94.9	0.19	0.18	40.4
East: Beaton Ave											
4	L2	160	0.0	2.777	1638.6	LOS F	74.1	518.8	1.00	3.36	2.1
6	R2	7	0.0	2.777	1776.1	LOS F	74.1	518.8	1.00	3.36	2.1
Approach		167	0.0	2.777	1644.3	LOS F	74.1	518.8	1.00	3.36	2.1
North: Newline Rd											
7	L2	4	33.3	1.027	19.9	LOS B	0.0	0.0	0.00	0.00	47.2
8	T1	1968	0.9	1.027	15.2	LOS B	0.0	0.0	0.00	0.00	48.1
Approach		1972	0.9	1.027	15.2	NA	0.0	0.0	0.00	0.00	48.1
All Vehicles		2729	1.5	2.777	120.4	NA	74.1	518.8	0.10	0.25	20.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Beaton Ave-Newline - 2022 with Development]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	353	2.4	0.243	0.2	LOS A	1.1	8.0	0.15	0.18	75.7
3	R2	174	1.8	0.243	7.2	LOS A	1.1	8.0	0.22	0.26	56.7
Approach		528	2.2	0.243	2.5	NA	1.1	8.0	0.18	0.21	68.1
East: Beaton Ave											
4	L2	108	4.1	0.090	5.0	LOS A	0.4	2.6	0.23	0.53	53.4
6	R2	10	0.0	0.090	8.3	LOS A	0.4	2.6	0.23	0.53	53.2
Approach		118	3.7	0.090	5.3	LOS A	0.4	2.6	0.23	0.53	53.4
North: Newline Rd											
7	L2	4	0.0	0.070	7.0	LOS A	0.0	0.0	0.00	0.02	74.3
8	T1	122	4.3	0.070	0.0	LOS A	0.0	0.0	0.00	0.02	79.6
Approach		126	4.2	0.070	0.2	NA	0.0	0.0	0.00	0.02	79.4
All Vehicles		771	2.8	0.243	2.6	NA	1.1	8.0	0.15	0.23	66.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [PM_Beaton Ave-Newline - 2027 with Development]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	1157	0.8	0.608	1.0	LOS A	4.2	29.7	0.23	0.10	76.5
3	R2	183	1.8	0.608	10.0	LOS A	4.2	29.7	0.30	0.13	57.6
Approach		1339	0.9	0.608	2.2	NA	4.2	29.7	0.24	0.10	73.2
East: Beaton Ave											
4	L2	118	4.1	0.190	5.9	LOS A	0.7	4.9	0.51	0.66	51.2
6	R2	11	0.0	0.190	36.6	LOS C	0.7	4.9	0.51	0.66	51.0
Approach		128	3.7	0.190	8.5	LOS A	0.7	4.9	0.51	0.66	51.1
North: Newline Rd											
7	L2	4	0.0	0.182	7.0	LOS A	0.0	0.0	0.00	0.01	74.4
8	T1	332	4.0	0.182	0.0	LOS A	0.0	0.0	0.00	0.01	79.8
Approach		337	3.9	0.182	0.1	NA	0.0	0.0	0.00	0.01	79.7
All Vehicles		1804	1.7	0.608	2.3	NA	4.2	29.7	0.21	0.12	72.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Beaton Ave-Newline - 2032 with Development]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Newline Rd											
2	T1	1411	0.7	0.732	1.5	LOS A	6.8	47.8	0.28	0.09	75.5
3	R2	189	1.8	0.732	12.3	LOS A	6.8	47.8	0.37	0.12	56.9
Approach		1600	0.8	0.732	2.8	NA	6.8	47.8	0.29	0.10	72.7
East: Beaton Ave											
4	L2	125	4.1	0.302	6.9	LOS A	1.1	8.0	0.63	0.78	48.7
6	R2	12	0.0	0.302	68.0	LOS E	1.1	8.0	0.63	0.78	48.5
Approach		137	3.7	0.302	12.1	LOS A	1.1	8.0	0.63	0.78	48.7
North: Newline Rd											
7	L2	5	0.0	0.216	7.0	LOS A	0.0	0.0	0.00	0.01	74.5
8	T1	397	3.5	0.216	0.0	LOS A	0.0	0.0	0.00	0.01	79.8
Approach		402	3.4	0.216	0.1	NA	0.0	0.0	0.00	0.01	79.7
All Vehicles		2138	1.5	0.732	2.9	NA	6.8	47.8	0.26	0.12	71.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Beaton Ave-Newline - 2037 with Development]

Beaton Ave - Newline
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	1982	0.5	1.001	12.5	LOS A	39.6	279.1	0.78	0.15	60.7
3	R2	199	1.8	1.001	37.7	LOS C	39.6	279.1	1.00	0.19	46.0
Approach		2181	0.6	1.001	14.8	NA	39.6	279.1	0.80	0.15	59.0
East: Beaton Ave											
4	L2	137	4.1	1.151	236.0	LOS F	20.7	149.6	1.00	3.52	11.3
6	R2	13	0.0	1.151	499.4	LOS F	20.7	149.6	1.00	3.52	11.2
Approach		150	3.7	1.151	258.1	LOS F	20.7	149.6	1.00	3.52	11.3
North: Newline Rd											
7	L2	5	0.0	0.291	7.0	LOS A	0.0	0.0	0.00	0.01	74.5
8	T1	542	2.7	0.291	0.0	LOS A	0.0	0.0	0.00	0.01	79.8
Approach		547	2.6	0.291	0.1	NA	0.0	0.0	0.00	0.01	79.7
All Vehicles		2878	1.2	1.151	24.7	NA	39.6	279.1	0.66	0.30	50.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM_Six Mile Road-Newline 2022 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	16	6.3	0.014	0.0	LOS A	0.0	0.3	0.06	0.21	76.0	
3	R2	8	12.5	0.014	6.9	LOS A	0.0	0.3	0.06	0.21	66.4	
Approach		24	8.3	0.014	2.3	NA	0.0	0.3	0.06	0.21	72.5	
East: Six Mile Rd												
4	L2	16	6.3	0.013	7.1	LOS A	0.0	0.4	0.08	0.60	64.8	
6	R2	3	0.0	0.013	6.8	LOS A	0.0	0.4	0.08	0.60	64.6	
Approach		19	5.3	0.013	7.1	LOS A	0.0	0.4	0.08	0.60	64.8	
North: Newline Rd												
7	L2	1	100.0	0.013	7.7	LOS A	0.0	0.0	0.00	0.05	71.8	
8	T1	22	4.5	0.013	0.0	LOS A	0.0	0.0	0.00	0.05	79.4	
Approach		23	8.7	0.013	0.6	NA	0.0	0.0	0.00	0.05	79.1	
All Vehicles		66	7.6	0.014	3.0	NA	0.0	0.4	0.04	0.27	72.1	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM_Six Mile Road-Newline 2027 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Newline Rd											
2	T1	27	0.0	0.018	0.0	LOS A	0.0	0.3	0.04	0.14	77.1
3	R2	8	0.0	0.018	6.7	LOS A	0.0	0.3	0.04	0.14	71.6
Approach		34	0.0	0.018	1.5	NA	0.0	0.3	0.04	0.14	75.8
East: Six Mile Rd											
4	L2	17	0.0	0.013	7.0	LOS A	0.1	0.4	0.08	0.60	65.1
6	R2	4	0.0	0.013	6.8	LOS A	0.1	0.4	0.08	0.60	64.6
Approach		20	0.0	0.013	7.0	LOS A	0.1	0.4	0.08	0.60	65.0
North: Newline Rd											
7	L2	1	0.0	0.014	6.9	LOS A	0.0	0.0	0.00	0.02	74.2
8	T1	25	4.3	0.014	0.0	LOS A	0.0	0.0	0.00	0.02	79.5
Approach		26	4.2	0.014	0.3	NA	0.0	0.0	0.00	0.02	79.3
All Vehicles		81	1.4	0.018	2.5	NA	0.1	0.4	0.04	0.22	73.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM_Six Mile Road-Newline 2032 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Newline Rd												
2	T1	31	0.0	0.021	0.0	LOS A	0.0	0.3	0.04	0.13	77.4	
3	R2	8	0.0	0.021	6.7	LOS A	0.0	0.3	0.04	0.13	71.8	
Approach		39	0.0	0.021	1.4	NA	0.0	0.3	0.04	0.13	76.1	
East: Six Mile Rd												
4	L2	18	0.0	0.014	7.0	LOS A	0.1	0.4	0.09	0.60	65.0	
6	R2	4	0.0	0.014	6.8	LOS A	0.1	0.4	0.09	0.60	64.6	
Approach		22	0.0	0.014	7.0	LOS A	0.1	0.4	0.09	0.60	65.0	
North: Newline Rd												
7	L2	1	0.0	0.015	6.9	LOS A	0.0	0.0	0.00	0.02	74.3	
8	T1	27	4.1	0.015	0.0	LOS A	0.0	0.0	0.00	0.02	79.5	
Approach		28	3.9	0.015	0.2	NA	0.0	0.0	0.00	0.02	79.3	
All Vehicles		89	1.2	0.021	2.4	NA	0.1	0.4	0.04	0.21	74.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM_Six Mile Road-Newline 2037 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Newline Rd												
2	T1	39	0.0	0.025	0.0	LOS A	0.0	0.3	0.04	0.11	77.7	
3	R2	8	0.0	0.025	6.7	LOS A	0.0	0.3	0.04	0.11	72.0	
Approach		48	0.0	0.025	1.2	NA	0.0	0.3	0.04	0.11	76.6	
East: Six Mile Rd												
4	L2	20	0.0	0.016	7.0	LOS A	0.1	0.4	0.09	0.60	65.0	
6	R2	4	0.0	0.016	6.9	LOS A	0.1	0.4	0.09	0.60	64.5	
Approach		24	0.0	0.016	7.0	LOS A	0.1	0.4	0.09	0.60	64.9	
North: Newline Rd												
7	L2	1	0.0	0.016	6.9	LOS A	0.0	0.0	0.00	0.02	74.3	
8	T1	30	4.0	0.016	0.0	LOS A	0.0	0.0	0.00	0.02	79.6	
Approach		31	3.8	0.016	0.2	NA	0.0	0.0	0.00	0.02	79.4	
All Vehicles		103	1.2	0.025	2.3	NA	0.1	0.4	0.04	0.20	74.3	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2022 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	60	10.6	0.040	0.0	LOS A	0.1	0.4	0.03	0.09	78.1	
3	R2	9	0.0	0.040	6.7	LOS A	0.1	0.4	0.03	0.09	72.4	
Approach		69	9.2	0.040	0.9	NA	0.1	0.4	0.03	0.09	77.3	
East: Six Mile Rd												
4	L2	11	9.6	0.008	7.2	LOS A	0.0	0.2	0.11	0.59	64.6	
6	R2	1	0.0	0.008	7.0	LOS A	0.0	0.2	0.11	0.59	64.4	
Approach		13	8.8	0.008	7.2	LOS A	0.0	0.2	0.11	0.59	64.5	
North: Newline Rd												
7	L2	1	0.0	0.025	6.9	LOS A	0.0	0.0	0.00	0.02	74.3	
8	T1	36	17.6	0.025	0.0	LOS A	0.0	0.0	0.00	0.02	79.6	
Approach		37	17.1	0.025	0.2	NA	0.0	0.0	0.00	0.02	79.4	
All Vehicles		119	11.6	0.040	1.3	NA	0.1	0.4	0.03	0.12	76.3	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2027 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	65	10.1	0.044	0.0	LOS A	0.1	0.5	0.04	0.10	77.8	
3	R2	11	0.0	0.044	6.8	LOS A	0.1	0.5	0.04	0.10	72.1	
Approach		76	8.6	0.044	1.0	NA	0.1	0.5	0.04	0.10	76.9	
East: Six Mile Rd												
4	L2	20	6.1	0.014	7.2	LOS A	0.1	0.4	0.13	0.59	64.6	
6	R2	1	0.0	0.014	7.1	LOS A	0.1	0.4	0.13	0.59	64.3	
Approach		21	5.8	0.014	7.2	LOS A	0.1	0.4	0.13	0.59	64.6	
North: Newline Rd												
7	L2	1	0.0	0.031	6.9	LOS A	0.0	0.0	0.00	0.01	74.4	
8	T1	48	13.7	0.031	0.0	LOS A	0.0	0.0	0.00	0.01	79.7	
Approach		49	13.4	0.031	0.2	NA	0.0	0.0	0.00	0.01	79.5	
All Vehicles		147	9.8	0.044	1.6	NA	0.1	0.5	0.04	0.14	75.7	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2032 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	68	10.1	0.047	0.0	LOS A	0.1	0.5	0.05	0.10	77.7
3	R2	12	0.0	0.047	6.8	LOS A	0.1	0.5	0.05	0.10	72.1
Approach		80	8.6	0.047	1.1	NA	0.1	0.5	0.05	0.10	76.8
East: Six Mile Rd											
4	L2	23	5.8	0.016	7.2	LOS A	0.1	0.5	0.13	0.59	64.6
6	R2	1	0.0	0.016	7.1	LOS A	0.1	0.5	0.13	0.59	64.3
Approach		24	5.4	0.016	7.2	LOS A	0.1	0.5	0.13	0.59	64.6
North: Newline Rd											
7	L2	1	0.0	0.034	6.9	LOS A	0.0	0.0	0.00	0.01	74.4
8	T1	53	12.9	0.034	0.0	LOS A	0.0	0.0	0.00	0.01	79.7
Approach		54	12.6	0.034	0.1	NA	0.0	0.0	0.00	0.01	79.6
All Vehicles		158	9.5	0.047	1.7	NA	0.1	0.5	0.04	0.14	75.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2037 with development]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	73	9.8	0.051	0.0	LOS A	0.1	0.6	0.06	0.10	77.6	
3	R2	14	0.0	0.051	6.8	LOS A	0.1	0.6	0.06	0.10	71.9	
Approach		87	8.2	0.051	1.1	NA	0.1	0.6	0.06	0.10	76.6	
East: Six Mile Rd												
4	L2	29	4.9	0.020	7.2	LOS A	0.1	0.6	0.15	0.58	64.5	
6	R2	1	0.0	0.020	7.2	LOS A	0.1	0.6	0.15	0.58	64.2	
Approach		30	4.6	0.020	7.2	LOS A	0.1	0.6	0.15	0.58	64.5	
North: Newline Rd												
7	L2	2	0.0	0.040	6.9	LOS A	0.0	0.0	0.00	0.02	74.2	
8	T1	62	11.6	0.040	0.0	LOS A	0.0	0.0	0.00	0.02	79.5	
Approach		64	11.2	0.040	0.3	NA	0.0	0.0	0.00	0.02	79.3	
All Vehicles		182	8.7	0.051	1.8	NA	0.1	0.6	0.05	0.16	75.2	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [AM_Six Mile-Pacific Hwy 2022 with development]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	640	14.5	0.217	0.0	LOS A	0.0	0.0	0.00	0.00	89.9
Approach		641	14.5	0.217	0.0	NA	0.0	0.0	0.00	0.00	89.8
North: Pacific Hwy											
8	T1	849	14.1	0.283	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
9	R2	2	0.0	0.003	8.9	LOS A	0.0	0.1	0.55	0.62	45.7
Approach		851	14.1	0.283	0.1	NA	0.0	0.1	0.00	0.00	89.6
NorthWest: Median (RT Stage 2)											
29a	R1	3	0.0	0.008	11.5	LOS A	0.0	0.2	0.68	0.95	50.0
Approach		3	0.0	0.008	11.5	LOS A	0.0	0.2	0.68	0.95	50.0
West: Six Mile Rd (RT Stage 1)											
10	L2	5	0.0	0.009	13.5	LOS A	0.0	0.2	0.55	0.88	64.4
12	R2	3	0.0	0.007	15.5	LOS B	0.0	0.2	0.63	0.89	29.2
Approach		8	0.0	0.009	14.3	LOS A	0.0	0.2	0.58	0.88	44.4
All Vehicles		1503	14.2	0.283	0.2	NA	0.0	0.2	0.01	0.01	89.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [AM_Six Mile-Pacific Hwy 2027 with development]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	724	14.6	0.246	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
Approach		726	14.5	0.246	0.0	NA	0.0	0.0	0.00	0.00	89.8
North: Pacific Hwy											
8	T1	922	10.5	0.304	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
9	R2	91	97.4	0.339	25.9	LOS B	1.4	35.2	0.80	0.99	44.0
Approach		1013	18.3	0.339	2.4	NA	1.4	35.2	0.07	0.09	82.1
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.010	12.5	LOS A	0.0	0.2	0.71	0.97	48.7
Approach		4	0.0	0.010	12.5	LOS A	0.0	0.2	0.71	0.97	48.7
West: Six Mile Rd (RT Stage 1)											
10	L2	12	0.0	0.025	14.6	LOS B	0.1	0.6	0.61	0.94	63.3
12	R2	4	0.0	0.013	19.9	LOS B	0.0	0.3	0.75	0.94	28.3
Approach		16	0.0	0.025	15.9	LOS B	0.1	0.6	0.64	0.94	49.2
All Vehicles		1757	16.6	0.339	1.6	NA	1.4	35.2	0.05	0.06	84.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [AM_Six Mile-Pacific Hwy 2032 with development]**

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	792	14.6	0.269	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
Approach		793	14.5	0.269	0.1	NA	0.0	0.0	0.00	0.00	89.8
North: Pacific Hwy											
8	T1	1049	14.1	0.350	0.1	LOS A	0.0	0.0	0.00	0.00	89.7
9	R2	3	0.0	0.006	12.2	LOS A	0.0	0.1	0.61	0.71	56.7
Approach		1053	14.1	0.350	0.1	NA	0.0	0.1	0.00	0.00	89.6
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.014	15.8	LOS B	0.0	0.3	0.78	1.01	45.1
Approach		4	0.0	0.014	15.8	LOS B	0.0	0.3	0.78	1.01	45.1
West: Six Mile Rd (RT Stage 1)											
10	L2	15	0.0	0.035	15.6	LOS B	0.1	0.8	0.65	0.97	62.3
12	R2	4	0.0	0.012	18.9	LOS B	0.0	0.3	0.73	0.93	28.5
Approach		19	0.0	0.035	16.3	LOS B	0.1	0.8	0.67	0.96	50.3
All Vehicles		1868	14.1	0.350	0.3	NA	0.1	0.8	0.01	0.01	88.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [AM_Six Mile-Pacific Hwy 2037 with development]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	2	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	893	14.6	0.303	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
Approach		894	14.5	0.303	0.1	NA	0.0	0.0	0.00	0.00	89.7
North: Pacific Hwy											
8	T1	1185	14.1	0.395	0.1	LOS A	0.0	0.0	0.00	0.00	89.6
9	R2	4	0.0	0.009	13.4	LOS A	0.0	0.2	0.67	0.76	55.6
Approach		1189	14.0	0.395	0.1	NA	0.0	0.2	0.00	0.00	89.4
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.021	20.1	LOS B	0.1	0.4	0.83	1.03	41.0
Approach		4	0.0	0.021	20.1	LOS B	0.1	0.4	0.83	1.03	41.0
West: Six Mile Rd (RT Stage 1)											
10	L2	20	0.0	0.056	17.4	LOS B	0.2	1.3	0.71	1.00	60.6
12	R2	4	0.0	0.017	21.9	LOS B	0.1	0.4	0.78	0.97	27.9
Approach		25	0.0	0.056	18.2	LOS B	0.2	1.3	0.72	0.99	50.5
All Vehicles		2112	14.1	0.395	0.3	NA	0.2	1.3	0.01	0.02	88.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [PM_Six Mile-Pacific Hwy 2022 with development]**

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	914	14.6	0.320	0.1	LOS A	0.0	0.0	0.00	0.00	89.8
Approach		915	14.6	0.320	0.1	NA	0.0	0.0	0.00	0.00	89.7
North: Pacific Hwy											
8	T1	694	10.1	0.213	0.0	LOS A	0.0	0.0	0.00	0.00	89.9
9	R2	5	24.0	0.014	16.4	LOS B	0.0	0.4	0.72	0.83	53.4
Approach		699	10.2	0.213	0.1	NA	0.0	0.4	0.01	0.01	89.4
NorthWest: Median (RT Stage 2)											
29a	R1	1	0.0	0.002	9.0	LOS A	0.0	0.0	0.58	0.89	53.2
Approach		1	0.0	0.002	9.0	LOS A	0.0	0.0	0.58	0.89	53.2
West: Six Mile Rd (RT Stage 1)											
10	L2	3	0.0	0.008	17.4	LOS B	0.0	0.2	0.71	0.90	60.7
12	R2	3	0.0	0.014	22.6	LOS B	0.0	0.3	0.79	0.96	27.7
Approach		6	0.0	0.014	20.1	LOS B	0.0	0.3	0.75	0.93	37.2
All Vehicles		1622	12.6	0.320	0.2	NA	0.0	0.4	0.01	0.01	89.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [PM_Six Mile-Pacific Hwy 2027 with development]**

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	1034	14.6	0.363	0.1	LOS A	0.0	0.0	0.00	0.00	89.7
Approach		1036	14.6	0.363	0.1	NA	0.0	0.0	0.00	0.00	89.7
North: Pacific Hwy											
8	T1	786	10.1	0.241	0.0	LOS A	0.0	0.0	0.00	0.00	89.9
9	R2	13	10.3	0.037	17.1	LOS B	0.1	0.9	0.76	0.91	52.7
Approach		798	10.1	0.241	0.3	NA	0.1	0.9	0.01	0.01	88.9
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.008	10.3	LOS A	0.0	0.2	0.64	0.95	51.5
Approach		4	0.0	0.008	10.3	LOS A	0.0	0.2	0.64	0.95	51.5
West: Six Mile Rd (RT Stage 1)											
10	L2	5	0.0	0.017	20.0	LOS B	0.1	0.4	0.77	0.98	58.3
12	R2	4	0.0	0.020	27.6	LOS B	0.1	0.5	0.84	1.01	26.7
Approach		9	0.0	0.020	23.2	LOS B	0.1	0.5	0.80	0.99	38.9
All Vehicles		1846	12.6	0.363	0.3	NA	0.1	0.9	0.01	0.01	88.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [PM_Six Mile-Pacific Hwy 2032 with development]**

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	1131	13.7	0.393	0.1	LOS A	0.0	0.0	0.00	0.00	89.2
Approach		1132	13.7	0.393	0.1	NA	0.0	0.0	0.00	0.00	89.1
North: Pacific Hwy											
8	T1	859	10.1	0.263	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
9	R2	15	9.2	0.051	18.9	LOS B	0.2	1.3	0.79	0.93	51.4
Approach		874	10.1	0.263	0.4	NA	0.2	1.3	0.01	0.02	88.7
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.010	11.4	LOS A	0.0	0.2	0.68	0.97	50.1
Approach		4	0.0	0.010	11.4	LOS A	0.0	0.2	0.68	0.97	50.1
West: Six Mile Rd (RT Stage 1)											
10	L2	6	0.0	0.023	22.3	LOS B	0.1	0.5	0.80	1.00	56.3
12	R2	4	0.0	0.026	32.3	LOS C	0.1	0.6	0.87	1.01	25.9
Approach		9	0.0	0.026	26.3	LOS B	0.1	0.6	0.83	1.00	38.2
All Vehicles		2019	12.1	0.393	0.3	NA	0.2	1.3	0.01	0.01	88.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [PM_Six Mile-Pacific Hwy 2037 with development]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Pacific Hwy											
1	L2	2	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	1264	13.8	0.442	0.1	LOS A	0.0	0.0	0.00	0.00	89.6
Approach		1265	13.8	0.442	0.1	NA	0.0	0.0	0.00	0.00	89.6
North: Pacific Hwy											
8	T1	968	10.1	0.296	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
9	R2	21	7.7	0.088	22.5	LOS B	0.3	2.1	0.84	0.94	48.9
Approach		989	10.1	0.296	0.5	NA	0.3	2.1	0.02	0.02	88.3
NorthWest: Median (RT Stage 2)											
29a	R1	4	0.0	0.013	13.5	LOS A	0.0	0.2	0.74	0.99	47.7
Approach		4	0.0	0.013	13.5	LOS A	0.0	0.2	0.74	0.99	47.7
West: Six Mile Rd (RT Stage 1)											
10	L2	7	0.0	0.039	27.1	LOS B	0.1	0.8	0.85	1.00	52.5
12	R2	4	0.0	0.040	42.5	LOS C	0.1	0.9	0.91	1.01	24.1
Approach		11	0.0	0.040	32.7	LOS C	0.1	0.9	0.87	1.00	36.7
All Vehicles		2270	12.1	0.442	0.5	NA	0.3	2.1	0.01	0.02	88.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2022 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	90	1.1	0.053	0.6	LOS A	0.2	2.5	0.15	0.07	78.4
3	R2	21	85.7	0.053	10.8	LOS A	0.2	2.5	0.38	0.17	55.2
Approach		111	17.1	0.053	2.6	NA	0.2	2.5	0.19	0.09	72.6
East: Waste Process Centre (Access)											
4	L2	21	71.4	0.027	7.2	LOS A	0.1	1.5	0.42	0.58	39.7
6	R2	1	0.0	0.027	6.4	LOS A	0.1	1.5	0.42	0.58	52.4
Approach		22	68.2	0.027	7.2	LOS A	0.1	1.5	0.42	0.58	40.2
North: Newline Rd											
7	L2	1	0.0	0.158	7.0	LOS A	0.0	0.0	0.00	0.00	74.6
8	T1	307	0.0	0.158	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		308	0.0	0.158	0.0	NA	0.0	0.0	0.00	0.00	79.9
All Vehicles		441	7.7	0.158	1.0	NA	0.2	2.5	0.07	0.05	74.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2027 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	280	0.4	0.207	6.5	LOS A	2.1	18.7	0.21	0.02	69.5
3	R2	22	85.0	0.207	39.5	LOS C	2.1	18.7	0.84	0.06	39.8
Approach		302	6.6	0.207	8.9	NA	2.1	18.7	0.25	0.02	66.0
East: Waste Process Centre (Access)											
4	L2	22	72.2	0.144	28.1	LOS B	0.4	6.6	0.89	0.95	32.4
6	R2	1	0.0	0.144	21.8	LOS B	0.4	6.6	0.89	0.95	40.4
Approach		23	69.0	0.144	27.9	LOS B	0.4	6.6	0.89	0.95	32.7
North: Newline Rd											
7	L2	1	0.0	0.548	7.0	LOS A	0.0	0.0	0.00	0.00	74.4
8	T1	1067	0.2	0.548	0.1	LOS A	0.0	0.0	0.00	0.00	79.6
Approach		1068	0.2	0.548	0.1	NA	0.0	0.0	0.00	0.00	79.6
All Vehicles		1392	2.7	0.548	2.5	NA	2.1	18.7	0.07	0.02	74.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2032 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	358	0.3	0.184	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
3	R2	23	85.0	0.744	262.1	LOS F	2.4	37.3	0.99	1.09	11.2
Approach		381	5.4	0.744	15.6	NA	2.4	37.3	0.06	0.06	58.6
East: Waste Process Centre (Access)											
4	L2	23	72.3	0.588	143.8	LOS F	1.7	25.9	0.99	1.08	16.1
6	R2	1	0.0	0.588	106.8	LOS F	1.7	25.9	0.99	1.08	17.8
Approach		24	69.3	0.588	142.3	LOS F	1.7	25.9	0.99	1.08	16.1
North: Newline Rd											
7	L2	1	0.0	0.709	7.1	LOS A	0.0	0.0	0.00	0.00	74.1
8	T1	1380	0.2	0.709	0.2	LOS A	0.0	0.0	0.00	0.00	79.3
Approach		1381	0.2	0.709	0.2	NA	0.0	0.0	0.00	0.00	79.3
All Vehicles		1786	2.2	0.744	5.4	NA	2.4	37.3	0.03	0.03	70.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2037 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	502	0.2	0.258	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
3	R2	24	85.0	1.000	367.8	LOS F	3.2	50.6	1.00	1.26	8.5
Approach		526	4.1	1.000	16.8	NA	3.2	50.6	0.05	0.06	57.7
East: Waste Process Centre (Access)											
4	L2	25	72.2	1.000	398.5	LOS F	4.6	68.6	1.00	1.33	6.9
6	R2	1	0.0	1.000	1575.3	LOS F	4.6	68.6	1.00	1.33	7.2
Approach		26	69.5	1.000	443.4	LOS F	4.6	68.6	1.00	1.33	6.9
North: Newline Rd											
7	L2	1	0.0	1.001	14.6	LOS B	0.0	0.0	0.00	0.00	55.6
8	T1	1950	0.1	1.001	9.3	LOS A	0.0	0.0	0.00	0.00	56.9
Approach		1951	0.1	1.001	9.3	NA	0.0	0.0	0.00	0.00	56.9
All Vehicles		2503	1.7	1.001	15.5	NA	4.6	68.6	0.02	0.03	53.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2022 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	356	1.8	0.124	0.0	LOS A	0.0	0.2	0.01	0.01	79.8
3	R2	4	0.0	0.124	7.0	LOS A	0.0	0.2	0.01	0.01	60.0
Approach		361	1.8	0.124	0.1	NA	0.0	0.2	0.01	0.01	79.5
East: Waste Process Centre (Access)											
4	L2	20	27.8	0.017	5.3	LOS A	0.1	0.7	0.22	0.50	47.3
6	R2	1	0.0	0.017	6.7	LOS A	0.1	0.7	0.22	0.50	53.2
Approach		21	26.3	0.017	5.4	LOS A	0.1	0.7	0.22	0.50	47.6
North: Newline Rd											
7	L2	1	0.0	0.065	7.0	LOS A	0.0	0.0	0.00	0.01	74.5
8	T1	114	6.6	0.065	0.0	LOS A	0.0	0.0	0.00	0.01	79.9
Approach		115	6.5	0.065	0.1	NA	0.0	0.0	0.00	0.01	79.8
All Vehicles		496	3.9	0.124	0.3	NA	0.1	0.7	0.01	0.03	77.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2027 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	1160	0.6	0.395	0.0	LOS A	0.1	0.4	0.01	0.00	79.9	
3	R2	4	0.0	0.395	8.5	LOS A	0.1	0.4	0.01	0.00	60.1	
Approach		1164	0.6	0.395	0.1	NA	0.1	0.4	0.01	0.00	79.8	
East: Waste Process Centre (Access)												
4	L2	22	27.8	0.027	6.2	LOS A	0.1	1.0	0.42	0.58	46.5	
6	R2	1	0.0	0.027	21.0	LOS B	0.1	1.0	0.42	0.58	52.2	
Approach		23	26.3	0.027	7.0	LOS A	0.1	1.0	0.42	0.58	46.8	
North: Newline Rd												
7	L2	1	0.0	0.169	7.0	LOS A	0.0	0.0	0.00	0.00	74.6	
8	T1	316	2.4	0.169	0.0	LOS A	0.0	0.0	0.00	0.00	79.9	
Approach		317	2.4	0.169	0.0	NA	0.0	0.0	0.00	0.00	79.9	
All Vehicles		1504	1.4	0.395	0.2	NA	0.1	1.0	0.01	0.01	79.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2032 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	1414	0.5	0.481	0.0	LOS A	0.1	0.6	0.01	0.00	79.9
3	R2	5	0.0	0.481	9.4	LOS A	0.1	0.6	0.01	0.00	60.1
Approach		1419	0.5	0.481	0.1	NA	0.1	0.6	0.01	0.00	79.8
East: Waste Process Centre (Access)											
4	L2	23	27.8	0.036	6.6	LOS A	0.1	1.3	0.49	0.62	45.9
6	R2	1	0.0	0.036	35.4	LOS C	0.1	1.3	0.49	0.62	51.4
Approach		24	26.3	0.036	8.1	LOS A	0.1	1.3	0.49	0.62	46.1
North: Newline Rd											
7	L2	1	0.0	0.202	7.0	LOS A	0.0	0.0	0.00	0.00	74.6
8	T1	380	2.1	0.202	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		381	2.1	0.202	0.0	NA	0.0	0.0	0.00	0.00	79.9
All Vehicles		1824	1.2	0.481	0.2	NA	0.1	1.3	0.01	0.01	79.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2037 with development]

Waste Processing Centre Access - Newline Road
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	1986	0.4	0.681	0.2	LOS A	0.6	4.5	0.02	0.00	79.6
3	R2	10	50.0	0.681	19.5	LOS B	0.6	4.5	0.04	0.00	58.6
Approach		1996	0.6	0.681	0.3	NA	0.6	4.5	0.02	0.00	79.4
East: Waste Process Centre (Access)											
4	L2	25	27.8	0.109	7.6	LOS A	0.3	3.2	0.73	0.80	41.3
6	R2	1	0.0	0.109	184.7	LOS F	0.3	3.2	0.73	0.80	45.7
Approach		27	26.3	0.109	17.0	LOS B	0.3	3.2	0.73	0.80	41.5
North: Newline Rd											
7	L2	1	0.0	0.277	7.0	LOS A	0.0	0.0	0.00	0.00	74.5
8	T1	524	1.6	0.277	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		525	1.6	0.277	0.0	NA	0.0	0.0	0.00	0.00	79.9
All Vehicles		2548	1.1	0.681	0.4	NA	0.6	4.5	0.03	0.01	78.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Kings Hill Development - Newline Rd 2022]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	24	4.2	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	67	0.0	0.048	5.6	LOS A	0.2	1.4	0.11	0.55	53.1
Approach		91	1.1	0.048	4.2	NA	0.2	1.4	0.08	0.41	54.7
East: Development Road											
4	L2	266	0.0	0.230	5.8	LOS A	1.0	7.0	0.14	0.55	53.2
6	R2	6	0.0	0.008	6.6	LOS A	0.0	0.2	0.28	0.55	52.6
Approach		272	0.0	0.230	5.8	LOS A	1.0	7.0	0.14	0.55	53.2
North: Newline Road											
7	L2	1	0.0	0.020	5.5	LOS A	0.0	0.0	0.00	0.02	58.2
8	T1	37	0.0	0.020	0.0	LOS A	0.0	0.0	0.00	0.02	59.9
Approach		38	0.0	0.020	0.1	NA	0.0	0.0	0.00	0.02	59.8
All Vehicles		401	0.2	0.230	4.9	NA	1.0	7.0	0.11	0.46	54.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Kings Hill Development - Newline Rd 2027]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	25	4.3	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	255	0.0	0.184	5.7	LOS A	0.8	5.9	0.14	0.55	53.0
Approach		281	0.4	0.184	5.2	NA	0.8	5.9	0.13	0.50	53.6
East: Development Road											
4	L2	1022	0.0	0.886	6.8	LOS A	17.8	124.6	0.63	0.48	51.7
6	R2	23	0.0	0.042	9.0	LOS A	0.2	1.1	0.47	0.67	50.8
Approach		1045	0.0	0.886	6.8	LOS A	17.8	124.6	0.63	0.48	51.7
North: Newline Road											
7	L2	6	0.0	0.022	5.5	LOS A	0.0	0.0	0.00	0.08	57.6
8	T1	36	3.0	0.022	0.0	LOS A	0.0	0.0	0.00	0.08	59.2
Approach		42	2.6	0.022	0.8	NA	0.0	0.0	0.00	0.08	59.0
All Vehicles		1368	0.2	0.886	6.3	NA	17.8	124.6	0.50	0.47	52.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM Kings Hill Development - Newline Rd 2032]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	25	4.4	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	333	0.0	0.241	5.7	LOS A	1.2	8.2	0.15	0.55	52.9
Approach		358	0.3	0.241	5.3	NA	1.2	8.2	0.14	0.51	53.4
East: Development Road											
4	L2	1333	0.0	1.157	296.3	LOS F	327.5	2292.2	1.00	1.57	10.2
6	R2	30	0.0	0.063	10.4	LOS A	0.2	1.6	0.53	0.73	49.9
Approach		1363	0.0	1.157	290.1	LOS F	327.5	2292.2	0.99	1.55	10.3
North: Newline Road											
7	L2	7	0.0	0.023	5.5	LOS A	0.0	0.0	0.00	0.09	57.6
8	T1	38	2.9	0.023	0.0	LOS A	0.0	0.0	0.00	0.09	59.1
Approach		45	2.5	0.023	0.9	NA	0.0	0.0	0.00	0.09	58.9
All Vehicles		1766	0.1	1.157	225.0	NA	327.5	2292.2	0.79	1.31	12.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Kings Hill Development - Newline Rd 2037]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	26	4.5	0.014	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	475	0.0	0.346	5.8	LOS A	1.9	13.3	0.18	0.55	52.9
Approach		502	0.2	0.346	5.5	NA	1.9	13.3	0.17	0.52	53.2
East: Development Road											
4	L2	1901	0.0	1.657	1190.7	LOS F	1050.4	7352.6	1.00	3.96	2.9
6	R2	42	0.0	0.119	13.7	LOS A	0.4	3.0	0.63	0.85	47.7
Approach		1943	0.0	1.657	1165.1	LOS F	1050.4	7352.6	0.99	3.89	3.0
North: Newline Road											
7	L2	11	0.0	0.026	5.5	LOS A	0.0	0.0	0.00	0.13	57.2
8	T1	39	3.1	0.026	0.0	LOS A	0.0	0.0	0.00	0.13	58.8
Approach		50	2.4	0.026	1.2	NA	0.0	0.0	0.00	0.13	58.4
All Vehicles		2495	0.1	1.657	908.5	NA	1050.4	7352.6	0.81	3.14	3.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Kings Hill Development - Newline Rd 2022]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	76	8.4	0.042	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	282	0.0	0.205	5.7	LOS A	1.0	6.7	0.16	0.55	52.9
Approach		358	1.8	0.205	4.5	NA	1.0	6.7	0.12	0.44	54.3
East: Development Road											
4	L2	70	0.0	0.062	5.8	LOS A	0.2	1.6	0.13	0.55	53.2
6	R2	2	0.0	0.003	10.0	LOS A	0.0	0.1	0.52	0.62	50.1
Approach		72	0.0	0.062	5.9	LOS A	0.2	1.6	0.14	0.55	53.1
North: Newline Road											
7	L2	6	0.0	0.031	5.5	LOS A	0.0	0.0	0.00	0.08	57.6
8	T1	42	18.1	0.031	0.0	LOS A	0.0	0.0	0.00	0.08	59.2
Approach		48	15.7	0.031	0.7	NA	0.0	0.0	0.00	0.08	58.9
All Vehicles		477	2.9	0.205	4.3	NA	1.0	6.7	0.11	0.42	54.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Kings Hill Development - Newline Rd 2027]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	79	8.3	0.047	0.1	LOS A	3.5	26.7	1.00	0.00	55.6
3	R2	1082	0.0	0.803	7.4	LOS A	14.4	101.0	0.52	0.55	51.9
Approach		1161	0.6	0.803	6.9	NA	14.4	101.0	0.55	0.51	52.1
East: Development Road											
4	L2	271	0.0	0.239	5.9	LOS A	1.0	7.3	0.18	0.55	53.1
6	R2	6	0.0	0.106	66.2	LOS E	0.3	2.1	0.94	0.98	28.3
Approach		277	0.0	0.239	7.2	LOS A	1.0	7.3	0.20	0.56	52.1
North: Newline Road											
7	L2	24	0.0	0.042	5.5	LOS A	0.0	0.0	0.00	0.21	56.4
8	T1	44	17.8	0.042	0.0	LOS A	0.0	0.0	0.00	0.21	57.9
Approach		68	11.5	0.042	2.0	NA	0.0	0.0	0.00	0.21	57.3
All Vehicles		1505	1.0	0.803	6.8	NA	14.4	101.0	0.46	0.51	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Kings Hill Development - Newline Rd 2032]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	82	8.3	0.049	0.2	LOS A	3.6	27.9	1.00	0.00	55.6
3	R2	1333	0.0	1.003	41.7	LOS C	118.6	830.4	1.00	0.84	34.9
Approach		1415	0.5	1.003	39.3	NA	118.6	830.4	1.00	0.79	35.7
East: Development Road											
4	L2	333	0.0	0.294	5.9	LOS A	1.4	9.6	0.18	0.55	53.0
6	R2	7	0.0	0.377	228.7	LOS F	1.0	7.0	0.99	1.01	12.5
Approach		341	0.0	0.377	10.7	LOS A	1.4	9.6	0.20	0.56	49.6
North: Newline Road											
7	L2	30	0.0	0.042	5.5	LOS A	0.0	0.0	0.00	0.26	55.9
8	T1	37	21.7	0.042	0.0	LOS A	0.0	0.0	0.00	0.26	57.4
Approach		67	12.1	0.042	2.5	NA	0.0	0.0	0.00	0.26	56.7
All Vehicles		1823	0.8	1.003	32.6	NA	118.6	830.4	0.81	0.73	38.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [PM Kings Hill Development - Newline Rd 2037]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	87	8.3	0.053	0.3	LOS A	2.9	22.5	1.00	0.00	55.6
3	R2	1901	0.0	1.443	806.5	LOS F	784.1	5488.9	1.00	5.76	4.2
Approach		1987	0.4	1.443	771.3	NA	784.1	5488.9	1.00	5.51	4.4
East: Development Road											
4	L2	475	0.0	0.426	6.1	LOS A	2.3	16.4	0.25	0.56	52.8
6	R2	11	0.0	1.000	721.2	LOS F	2.9	20.4	1.00	1.14	4.7
Approach		486	0.0	1.000	21.7	LOS B	2.9	20.4	0.27	0.57	43.1
North: Newline Road											
7	L2	42	0.0	0.055	5.5	LOS A	0.0	0.0	0.00	0.28	55.8
8	T1	48	17.8	0.055	0.0	LOS A	0.0	0.0	0.00	0.28	57.3
Approach		91	9.5	0.055	2.6	NA	0.0	0.0	0.00	0.28	56.6
All Vehicles		2564	0.6	1.443	602.1	NA	784.1	5488.9	0.83	4.39	5.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

With Interchange SIDRA Results

MOVEMENT SUMMARY

 **Site: 1 [AM William Bailey-Newline - 2022 with Development & PH Interchange]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	140	3.9	0.189	7.4	LOS A	1.1	8.1	0.71	0.75	53.0
2	T1	51	4.4	0.179	6.9	LOS A	1.1	8.1	0.71	0.75	52.2
3	R2	102	3.2	0.179	11.9	LOS A	1.1	8.1	0.71	0.75	52.2
Approach		293	3.8	0.189	8.9	LOS A	1.1	8.1	0.71	0.75	52.6
East: William Bailey St											
4	L2	267	3.3	0.354	7.8	LOS A	2.0	14.3	0.68	0.78	52.7
5	T1	529	5.2	0.602	9.2	LOS A	5.4	42.4	0.79	0.89	52.9
6	R2	50	33.3	0.602	15.2	LOS B	5.4	42.4	0.79	0.89	51.9
Approach		846	6.2	0.602	9.1	LOS A	5.4	42.4	0.76	0.86	52.8
North: Newline Rd											
7	L2	48	23.9	0.389	9.9	LOS A	2.2	16.7	0.76	0.90	50.4
8	T1	140	0.0	0.389	9.0	LOS A	2.2	16.7	0.76	0.90	52.3
9	R2	64	4.9	0.389	14.2	LOS A	2.2	16.7	0.76	0.90	52.2
Approach		253	5.8	0.389	10.5	LOS A	2.2	16.7	0.76	0.90	51.9
West: Seahman Road											
10	L2	29	0.0	0.220	5.5	LOS A	1.1	8.0	0.43	0.54	53.8
11	T1	469	6.6	0.541	5.3	LOS A	4.1	30.0	0.49	0.59	53.8
12	R2	383	1.7	0.541	10.1	LOS A	4.1	30.0	0.52	0.61	53.4
Approach		881	4.2	0.541	7.4	LOS A	4.1	30.0	0.50	0.59	53.6
All Vehicles		2272	5.1	0.602	8.6	LOS A	5.4	42.4	0.65	0.75	53.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\William Bailey St-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

 Site: 1 [PM William Bailey-Newline - 2022 with Development & PH Interchange]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Port Stephens St											
1	L2	349	3.2	0.556	11.6	LOS A	4.7	33.6	0.90	1.02	49.9
2	T1	177	1.2	0.698	13.3	LOS A	8.1	58.2	0.98	1.11	48.3
3	R2	364	3.0	0.698	18.3	LOS B	8.1	58.2	0.98	1.11	48.3
Approach		890	2.7	0.698	14.7	LOS B	8.1	58.2	0.95	1.08	48.9
East: William Bailey St											
4	L2	252	2.6	0.327	6.8	LOS A	1.8	13.0	0.62	0.72	53.5
5	T1	644	6.2	0.653	8.0	LOS A	6.5	49.0	0.79	0.82	53.2
6	R2	48	9.1	0.653	13.1	LOS A	6.5	49.0	0.79	0.82	53.1
Approach		944	5.4	0.653	7.9	LOS A	6.5	49.0	0.74	0.79	53.3
North: Newline Rd											
7	L2	39	35.2	0.392	12.9	LOS A	2.4	19.4	0.86	0.96	48.9
8	T1	118	1.8	0.392	11.3	LOS A	2.4	19.4	0.86	0.96	50.8
9	R2	34	12.6	0.392	16.9	LOS B	2.4	19.4	0.86	0.96	50.5
Approach		191	10.5	0.392	12.6	LOS A	2.4	19.4	0.86	0.96	50.4
West: Seahman Road											
10	L2	88	5.0	0.305	8.5	LOS A	1.7	12.4	0.74	0.83	51.0
11	T1	461	4.3	0.750	11.5	LOS A	9.6	71.0	0.94	1.04	50.3
12	R2	272	3.6	0.750	17.1	LOS B	9.6	71.0	0.98	1.08	49.8
Approach		820	4.2	0.750	13.0	LOS A	9.6	71.0	0.93	1.03	50.2
All Vehicles		2844	4.5	0.750	11.8	LOS A	9.6	71.0	0.87	0.96	50.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\William Bailey St-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

Site: 1 [AM William Bailey-Newline - 2027 with Development & PH Interchange]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	152	3.9	0.260	8.9	LOS A	1.7	12.2	0.83	0.85	51.9
2	T1	82	2.9	0.278	8.2	LOS A	2.0	14.4	0.85	0.84	51.6
3	R2	113	4.3	0.278	13.2	LOS A	2.0	14.4	0.85	0.84	51.6
Approach		347	3.8	0.278	10.1	LOS A	2.0	14.4	0.84	0.85	51.7
East: William Bailey St											
4	L2	292	3.3	0.501	12.5	LOS A	3.7	26.9	0.86	0.99	49.4
5	T1	577	5.2	0.838	23.4	LOS B	14.3	111.3	1.00	1.41	44.1
6	R2	54	33.3	0.838	29.8	LOS C	14.3	111.3	1.00	1.41	43.4
Approach		923	6.2	0.838	20.3	LOS B	14.3	111.3	0.96	1.28	45.6
North: Newline Rd											
7	L2	51	23.9	0.774	19.6	LOS B	7.9	58.0	0.95	1.22	44.6
8	T1	257	0.0	0.774	18.4	LOS B	7.9	58.0	0.95	1.22	46.1
9	R2	150	2.2	0.774	23.5	LOS B	7.9	58.0	0.95	1.22	46.1
Approach		458	3.4	0.774	20.2	LOS B	7.9	58.0	0.95	1.22	45.9
West: Seahman Road											
10	L2	53	0.0	0.257	5.9	LOS A	1.3	9.7	0.49	0.59	53.6
11	T1	511	6.6	0.632	5.9	LOS A	5.5	41.0	0.60	0.64	53.4
12	R2	418	1.7	0.632	10.7	LOS A	5.5	41.0	0.64	0.65	53.0
Approach		981	4.2	0.632	7.9	LOS A	5.5	41.0	0.61	0.64	53.2
All Vehicles		2709	4.7	0.838	14.5	LOS A	14.3	111.3	0.82	0.98	48.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [PM William Bailey-Newline - 2027 with Development & PH Interchange]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	380	3.2	0.726	18.8	LOS B	7.8	56.0	1.00	1.19	45.5
2	T1	308	0.8	1.024	107.6	LOS F	57.7	407.7	1.00	3.06	22.0
3	R2	390	1.2	1.024	112.5	LOS F	57.7	407.7	1.00	3.06	22.0
Approach		1078	1.8	1.024	78.0	LOS F	57.7	407.7	1.00	2.40	26.8
East: William Bailey St											
4	L2	275	2.6	0.374	7.4	LOS A	2.1	15.3	0.67	0.77	53.0
5	T1	702	6.2	0.746	10.5	LOS A	9.2	69.8	0.89	0.97	52.0
6	R2	53	9.1	0.746	15.6	LOS B	9.2	69.8	0.89	0.97	51.9
Approach		1030	5.4	0.746	9.9	LOS A	9.2	69.8	0.83	0.92	52.3
North: Newline Rd											
7	L2	41	35.1	0.593	20.3	LOS B	4.8	37.5	0.96	1.11	44.6
8	T1	152	1.4	0.593	18.4	LOS B	4.8	37.5	0.96	1.11	46.2
9	R2	58	7.6	0.593	23.8	LOS B	4.8	37.5	0.96	1.11	46.1
Approach		251	8.3	0.593	20.0	LOS B	4.8	37.5	0.96	1.11	45.9
West: Seahman Road											
10	L2	175	2.7	0.434	11.2	LOS A	2.8	20.7	0.85	0.95	50.2
11	T1	510	4.2	1.065	150.0	LOS F	88.7	647.7	0.99	4.01	17.6
12	R2	295	3.3	1.065	161.7	LOS F	88.7	647.7	1.00	4.16	17.1
Approach		980	3.7	1.065	128.8	LOS F	88.7	647.7	0.97	3.51	19.7
All Vehicles		3338	3.9	1.065	67.6	LOS E	88.7	647.7	0.94	2.17	28.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [AM William Bailey-Newline - 2032 with Development & PH Interchange]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	163	3.9	0.299	9.6	LOS A	2.0	14.2	0.86	0.89	51.4
2	T1	97	2.7	0.327	8.8	LOS A	2.4	17.5	0.89	0.88	51.4
3	R2	120	4.2	0.327	13.8	LOS A	2.4	17.5	0.89	0.88	51.3
Approach		380	3.7	0.327	10.7	LOS A	2.4	17.5	0.87	0.89	51.4
East: William Bailey St											
4	L2	311	3.3	0.624	18.1	LOS B	5.6	40.5	0.95	1.12	45.9
5	T1	616	5.2	1.038	135.8	LOS F	66.5	518.3	1.00	3.67	19.0
6	R2	58	33.3	1.038	142.4	LOS F	66.5	518.3	1.00	3.67	18.8
Approach		985	6.2	1.038	99.0	LOS F	66.5	518.3	0.98	2.86	23.2
North: Newline Rd											
7	L2	52	23.9	1.004	87.6	LOS F	34.9	255.6	1.00	2.62	24.7
8	T1	307	0.0	1.004	86.3	LOS F	34.9	255.6	1.00	2.62	25.2
9	R2	186	1.8	1.004	91.3	LOS F	34.9	255.6	1.00	2.62	25.2
Approach		546	2.9	1.004	88.1	LOS F	34.9	255.6	1.00	2.62	25.1
West: Seahman Road											
10	L2	63	0.0	0.282	6.1	LOS A	1.5	10.9	0.52	0.62	53.4
11	T1	545	6.6	0.693	6.6	LOS A	7.3	53.9	0.67	0.70	53.1
12	R2	445	1.7	0.693	11.5	LOS A	7.3	53.9	0.73	0.73	52.6
Approach		1054	4.1	0.693	8.7	LOS A	7.3	53.9	0.69	0.71	52.9
All Vehicles		2964	4.6	1.038	53.6	LOS D	66.5	518.3	0.87	1.80	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\William Bailey St-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

Site: 1 [PM William Bailey-Newline - 2032 with Development & PH Interchange]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	412	3.1	0.925	50.6	LOS D	17.7	127.1	1.00	1.65	32.6
2	T1	357	0.7	1.349	651.5	LOS F	273.2	1944.5	1.00	9.67	5.3
3	R2	430	3.0	1.349	656.5	LOS F	273.2	1944.5	1.00	9.67	5.3
Approach		1199	2.4	1.349	447.0	LOS F	273.2	1944.5	1.00	6.92	7.3
East: William Bailey St											
4	L2	298	2.6	0.425	8.2	LOS A	2.6	18.8	0.72	0.83	52.4
5	T1	761	6.2	0.845	15.2	LOS B	14.3	108.1	1.00	1.20	48.8
6	R2	57	8.9	0.845	20.3	LOS B	14.3	108.1	1.00	1.20	48.7
Approach		1116	5.3	0.845	13.6	LOS A	14.3	108.1	0.92	1.10	49.7
North: Newline Rd											
7	L2	43	35.2	0.736	31.1	LOS C	7.4	57.7	1.00	1.25	39.6
8	T1	166	1.4	0.736	29.0	LOS C	7.4	57.7	1.00	1.25	40.9
9	R2	66	7.1	0.736	34.4	LOS C	7.4	57.7	1.00	1.25	40.8
Approach		274	8.0	0.736	30.6	LOS C	7.4	57.7	1.00	1.25	40.6
West: Seahman Road											
10	L2	207	2.5	0.422	10.0	LOS A	2.7	19.4	0.81	0.92	51.0
11	T1	545	4.3	1.037	107.7	LOS F	73.4	538.6	1.00	3.39	22.0
12	R2	320	3.2	1.037	114.4	LOS F	73.4	538.6	1.00	3.43	21.8
Approach		1072	3.6	1.037	90.8	LOS F	73.4	538.6	0.96	2.92	24.6
All Vehicles		3661	4.1	1.349	179.4	LOS F	273.2	1944.5	0.97	3.55	15.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 1 [AM William Bailey-Newline - 2037 with Development & PH Interchange]**

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	178	3.9	0.339	9.9	LOS A	2.3	16.4	0.88	0.92	51.2
2	T1	122	2.3	0.391	9.1	LOS A	3.0	21.6	0.92	0.91	51.3
3	R2	132	4.3	0.391	14.2	LOS A	3.0	21.6	0.92	0.91	51.3
Approach		432	3.6	0.391	11.0	LOS A	3.0	21.6	0.90	0.91	51.2
East: William Bailey St											
4	L2	340	3.3	0.654	18.7	LOS B	6.2	44.4	0.95	1.14	45.5
5	T1	673	5.2	1.088	204.8	LOS F	102.6	800.1	1.00	5.07	14.0
6	R2	63	33.3	1.088	211.3	LOS F	102.6	800.1	1.00	5.07	14.0
Approach		1076	6.2	1.088	146.4	LOS F	102.6	800.1	0.98	3.83	17.9
North: Newline Rd											
7	L2	55	23.9	1.512	942.7	LOS F	310.4	2255.4	1.00	11.90	3.7
8	T1	396	0.0	1.512	941.7	LOS F	310.4	2255.4	1.00	11.90	3.7
9	R2	252	1.4	1.512	946.8	LOS F	310.4	2255.4	1.00	11.90	3.7
Approach		703	2.4	1.512	943.6	LOS F	310.4	2255.4	1.00	11.90	3.7
West: Seahman Road											
10	L2	81	0.0	0.324	6.5	LOS A	1.7	13.0	0.57	0.66	53.2
11	T1	596	6.6	0.796	8.4	LOS A	11.4	84.2	0.80	0.81	52.1
12	R2	490	2.3	0.796	13.8	LOS A	11.4	84.2	0.88	0.86	51.5
Approach		1167	4.3	0.796	10.5	LOS A	11.4	84.2	0.82	0.82	51.9
All Vehicles		3378	4.4	1.512	248.0	LOS F	310.4	2255.4	0.92	4.10	12.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 1 [PM William Bailey-Newline - 2037 with Development & PH Interchange]

William Bailey St - Newline Rd
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	444	3.2	1.149	315.3	LOS F	89.1	640.6	1.00	4.61	9.7
2	T1	454	0.6	1.771	1406.5	LOS F	517.8	3681.7	1.00	13.95	2.6
3	R2	463	3.0	1.771	1411.6	LOS F	517.8	3681.7	1.00	13.95	2.6
Approach		1361	2.3	1.771	1052.3	LOS F	517.8	3681.7	1.00	10.91	3.4
East: William Bailey St											
4	L2	321	2.6	0.483	9.6	LOS A	3.3	23.8	0.77	0.91	51.4
5	T1	819	6.2	0.961	37.4	LOS C	33.2	250.7	1.00	1.89	37.9
6	R2	62	9.1	0.961	42.5	LOS D	33.2	250.7	1.00	1.89	37.8
Approach		1201	5.4	0.961	30.3	LOS C	33.2	250.7	0.94	1.63	40.7
North: Newline Rd											
7	L2	44	35.1	0.998	139.6	LOS F	29.1	224.4	1.00	2.37	18.5
8	T1	193	1.2	0.998	137.1	LOS F	29.1	224.4	1.00	2.37	18.8
9	R2	83	5.8	0.998	142.4	LOS F	29.1	224.4	1.00	2.37	18.8
Approach		320	7.1	0.998	138.8	LOS F	29.1	224.4	1.00	2.37	18.7
West: Seahman Road											
10	L2	275	2.0	0.464	9.4	LOS A	3.2	22.6	0.79	0.91	51.5
11	T1	587	4.3	1.041	110.1	LOS F	80.5	591.5	1.00	3.54	21.7
12	R2	344	3.3	1.041	115.0	LOS F	80.5	591.5	1.00	3.54	21.7
Approach		1206	3.5	1.041	88.5	LOS F	80.5	591.5	0.95	2.94	24.9
All Vehicles		4088	3.9	1.771	396.1	LOS F	517.8	3681.7	0.97	5.16	8.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM William Bailey-Newline - 2037 with Development & PH Interchange - mitigation]

William Bailey St - Newline Rd

Signals - Fixed Time Isolated Cycle Time = 126 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	178	3.9	0.218	16.5	LOS B	4.3	31.3	0.58	0.71	46.8
2	T1	122	2.3	0.218	48.0	LOS D	4.0	28.7	0.89	0.69	33.7
3	R2	131	4.0	0.818	58.7	LOS E	7.3	53.5	1.00	0.93	30.5
Approach		431	3.5	0.818	38.3	LOS C	7.3	53.5	0.80	0.77	36.8
East: William Bailey St											
4	L2	340	3.3	0.393	19.1	LOS B	10.6	76.4	0.64	0.75	45.2
5	T1	673	5.2	0.872	49.6	LOS D	31.8	243.9	0.95	0.92	33.3
6	R2	63	33.3	0.121	20.5	LOS B	1.5	13.7	0.68	0.71	43.7
Approach		1076	6.2	0.872	38.2	LOS C	31.8	243.9	0.84	0.85	36.9
North: Newline Rd											
7	L2	55	23.9	0.498	62.3	LOS E	8.7	69.0	0.94	0.88	30.4
8	T1	396	0.0	0.816	58.4	LOS E	18.3	128.4	0.98	0.92	30.7
9	R2	252	1.4	0.848	66.8	LOS E	14.8	105.8	1.00	1.10	28.5
Approach		703	2.4	0.848	61.7	LOS E	18.3	128.4	0.99	0.98	29.8
West: Seahman Road											
10	L2	81	0.0	0.465	40.4	LOS C	11.9	89.4	0.85	0.77	37.3
11	T1	596	6.6	0.762	41.5	LOS C	23.9	184.9	0.94	0.84	35.7
12	R2	490	2.3	0.790	42.0	LOS C	23.4	167.3	0.97	0.95	35.5
Approach		1167	4.3	0.790	41.6	LOS C	23.9	184.9	0.94	0.88	35.7
All Vehicles		3378	4.4	0.872	44.3	LOS D	31.8	243.9	0.90	0.88	34.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	50	43.0	LOS E	0.1	0.1	0.83	0.83	
P2	East Full Crossing	50	57.3	LOS E	0.2	0.2	0.95	0.95	
P3	North Full Crossing	50	43.0	LOS E	0.1	0.1	0.83	0.83	
P4	West Full Crossing	50	57.3	LOS E	0.2	0.2	0.95	0.95	
All Pedestrians		200	50.1	LOS E			0.89	0.89	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM William Bailey-Newline - 2037 with Development & PH Interchange - mitigation]

William Bailey St - Newline Rd

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Port Stephens St											
1	L2	444	3.2	0.477	25.3	LOS B	15.4	110.4	0.65	0.84	42.0
2	T1	454	0.6	0.516	45.2	LOS D	16.2	114.3	0.88	0.74	34.6
3	R2	463	3.0	0.925	68.3	LOS E	33.8	243.1	1.00	1.01	28.3
Approach		1361	2.3	0.925	46.6	LOS D	33.8	243.1	0.85	0.87	34.0
East: William Bailey St											
4	L2	320	2.6	0.277	12.7	LOS A	7.3	52.5	0.44	0.68	49.2
5	T1	819	6.2	1.001	100.1	LOS F	65.9	497.7	0.95	1.22	22.9
6	R2	62	9.1	0.196	27.7	LOS B	2.1	15.7	0.77	0.72	40.9
Approach		1201	5.4	1.001	73.1	LOS F	65.9	497.7	0.80	1.05	27.4
North: Newline Rd											
7	L2	44	35.1	0.611	66.5	LOS E	4.8	42.6	1.00	0.89	29.1
8	T1	193	1.2	1.002	111.0	LOS F	14.3	101.4	1.00	1.18	21.3
9	R2	83	5.8	0.393	44.9	LOS D	4.1	30.6	0.96	0.76	34.2
Approach		320	7.1	1.002	87.7	LOS F	14.3	101.4	0.99	1.03	24.7
West: Seahman Road											
10	L2	275	2.0	0.371	15.2	LOS B	7.1	51.4	0.60	0.70	48.2
11	T1	587	4.3	0.609	28.6	LOS C	26.6	197.5	0.79	0.72	40.8
12	R2	344	3.3	0.910	71.4	LOS F	23.4	168.5	1.00	1.06	27.6
Approach		1206	3.5	0.910	37.7	LOS C	26.6	197.5	0.81	0.81	37.0
All Vehicles		4088	3.9	1.002	55.0	LOS D	65.9	497.7	0.83	0.92	31.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	50	42.5	LOS E	0.2	0.2	0.78	0.78	
P2	East Full Crossing	50	49.8	LOS E	0.2	0.2	0.84	0.84	
P3	North Full Crossing	50	31.0	LOS D	0.1	0.1	0.67	0.67	
P4	West Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96	
All Pedestrians		200	46.9	LOS E			0.81	0.81	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2022 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	267	12.0	0.260	9.1	LOS A	2.0	16.6	0.18	0.67	60.1
2	T1	166	7.3	0.651	70.4	LOS E	6.4	48.5	0.99	0.78	32.9
Approach		433	10.2	0.651	32.6	LOS C	6.4	48.5	0.49	0.71	45.7
North: Adelaide St											
8	T1	366	1.5	0.148	4.8	LOS A	2.0	14.1	0.17	0.15	80.6
9	R2	606	3.4	0.610	10.1	LOS A	5.6	41.0	0.18	0.69	58.4
Approach		972	2.7	0.610	8.1	LOS A	5.6	41.0	0.18	0.49	65.2
West: William Bailey St (RT Stage 1)											
10	L2	342	7.1	0.234	8.9	LOS A	2.7	20.9	0.17	0.66	66.9
12	R2	292	6.8	0.649	55.6	LOS D	16.7	129.5	0.89	0.83	21.9
Approach		634	6.9	0.649	30.4	LOS C	16.7	129.5	0.50	0.74	34.5
All Vehicles		2039	5.6	0.651	20.2	LOS B	16.7	129.5	0.34	0.62	47.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	46.4	LOS E	0.0	0.0	0.81	0.81
P4	West Full Crossing	5	64.1	LOS F	0.0	0.0	0.96	0.96
All Pedestrians		10	55.3	LOS E			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2027 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	377	9.2	0.374	9.6	LOS A	4.1	32.3	0.24	0.69	59.7
2	T1	181	7.3	0.710	71.1	LOS F	7.1	53.7	1.00	0.79	32.7
Approach		558	8.6	0.710	29.6	LOS C	7.1	53.7	0.49	0.72	47.1
North: Adelaide St											
8	T1	400	1.5	0.161	4.8	LOS A	2.2	15.6	0.18	0.15	80.5
9	R2	661	3.5	0.669	11.0	LOS A	8.3	60.6	0.23	0.71	57.7
Approach		1061	2.7	0.669	8.7	LOS A	8.3	60.6	0.21	0.50	64.6
West: William Bailey St (RT Stage 1)											
10	L2	373	7.1	0.256	9.1	LOS A	3.2	24.7	0.18	0.67	66.7
12	R2	318	6.8	0.707	56.5	LOS E	18.7	145.2	0.92	0.84	21.8
Approach		691	6.9	0.707	30.9	LOS C	18.7	145.2	0.52	0.75	34.4
All Vehicles		2310	5.4	0.710	20.4	LOS B	18.7	145.2	0.37	0.63	47.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	46.4	LOS E	0.0	0.0	0.81	0.81
P4	West Full Crossing	5	64.1	LOS F	0.0	0.0	0.96	0.96
All Pedestrians		10	55.3	LOS E			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2032 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	m		per veh	km/h
South: Adelaide St											
1	L2	430	8.6	0.489	11.4	LOS A	7.0	55.3	0.38	0.73	58.1
2	T1	193	7.3	0.669	66.8	LOS E	7.1	54.2	0.99	0.79	34.0
Approach		623	8.2	0.669	28.5	LOS C	7.1	55.3	0.57	0.75	47.7
North: Adelaide St											
8	T1	423	0.6	0.173	5.4	LOS A	2.5	17.9	0.20	0.17	79.4
9	R2	695	2.0	0.723	13.9	LOS A	12.2	87.9	0.33	0.82	55.1
Approach		1118	1.5	0.723	10.7	LOS A	12.2	87.9	0.28	0.58	62.3
West: William Bailey St (RT Stage 1)											
10	L2	398	7.1	0.301	9.1	LOS A	3.4	26.4	0.20	0.68	66.7
12	R2	339	6.8	0.728	54.6	LOS D	19.4	150.8	0.92	0.85	22.1
Approach		737	6.9	0.728	30.0	LOS C	19.4	150.8	0.53	0.76	34.7
All Vehicles		2478	4.8	0.728	20.9	LOS B	19.4	150.8	0.43	0.67	47.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		Pedestrian ped	m		per ped
P1	South Full Crossing	5	44.0	LOS E	0.0	0.0	0.81	0.81
P4	West Full Crossing	5	60.7	LOS F	0.0	0.0	0.95	0.95
All Pedestrians		10	52.4	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 1 [AM_Adelaide St-William Bailey St - 2037 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	523	7.8	0.637	11.9	LOS A	9.1	71.0	0.45	0.75	57.6
2	T1	211	7.3	0.479	61.0	LOS E	7.4	55.9	0.93	0.74	35.9
Approach		734	7.6	0.637	26.1	LOS B	9.1	71.0	0.59	0.75	49.1
North: Adelaide St											
8	T1	466	1.5	0.889	74.0	LOS F	17.3	122.7	1.00	0.95	31.8
9	R2	772	3.4	0.785	11.2	LOS A	9.7	70.5	0.25	0.81	57.5
Approach		1238	2.7	0.889	34.8	LOS C	17.3	122.7	0.53	0.86	44.1
West: William Bailey St (RT Stage 1)											
10	L2	436	7.1	0.334	9.3	LOS A	4.2	32.3	0.22	0.69	66.5
12	R2	371	6.8	0.897	73.7	LOS F	27.6	214.4	1.00	0.93	19.8
Approach		807	6.9	0.897	38.9	LOS C	27.6	214.4	0.58	0.80	32.0
All Vehicles		2779	5.2	0.897	33.7	LOS C	27.6	214.4	0.56	0.81	40.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	48.9	LOS E	0.0	0.0	0.84	0.84	
P4	West Full Crossing	5	56.7	LOS E	0.0	0.0	0.90	0.90	
All Pedestrians		10	52.8	LOS E			0.87	0.87	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2022 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	449	4.4	0.418	8.9	LOS A	3.2	23.9	0.21	0.68	60.6
2	T1	385	4.9	0.674	56.8	LOS E	13.1	96.6	0.95	0.79	37.5
Approach		834	4.6	0.674	31.0	LOS C	13.1	96.6	0.55	0.73	47.2
North: Adelaide St											
8	T1	196	2.8	0.070	0.8	LOS A	0.2	1.6	0.04	0.03	88.4
9	R2	623	4.9	0.624	8.8	LOS A	2.9	21.6	0.10	0.69	59.7
Approach		819	4.4	0.624	6.9	LOS A	2.9	21.6	0.09	0.53	64.7
West: William Bailey St (RT Stage 1)											
10	L2	641	2.4	0.438	11.3	LOS A	9.9	70.9	0.33	0.73	65.4
12	R2	222	6.9	0.694	63.5	LOS E	13.6	102.6	0.96	0.83	20.9
Approach		864	3.6	0.694	24.7	LOS B	13.6	102.6	0.49	0.76	42.4
All Vehicles		2516	4.2	0.694	21.0	LOS B	13.6	102.6	0.38	0.67	49.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	55.1	LOS E	0.0	0.0	0.90	0.90	
P4	West Full Crossing	5	50.7	LOS E	0.0	0.0	0.87	0.87	
All Pedestrians		10	52.9	LOS E			0.89	0.89	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2027 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	853	2.5	0.816	10.9	LOS A	20.9	151.4	0.53	0.79	58.8
2	T1	420	4.9	0.762	61.3	LOS E	15.6	114.5	0.97	0.83	35.8
Approach		1273	3.3	0.816	27.5	LOS B	20.9	151.4	0.67	0.80	48.6
North: Adelaide St											
8	T1	214	2.8	0.077	0.7	LOS A	0.2	1.6	0.03	0.03	88.5
9	R2	680	4.9	0.681	9.6	LOS A	5.2	38.6	0.15	0.71	59.0
Approach		893	4.4	0.681	7.5	LOS A	5.2	38.6	0.12	0.55	64.1
West: William Bailey St (RT Stage 1)											
10	L2	700	2.4	0.480	12.3	LOS A	11.0	78.5	0.35	0.75	64.3
12	R2	242	6.9	0.755	67.4	LOS E	15.9	119.8	0.98	0.85	20.5
Approach		942	3.6	0.755	26.5	LOS B	15.9	119.8	0.51	0.78	41.6
All Vehicles		3108	3.7	0.816	21.4	LOS B	20.9	151.4	0.47	0.72	49.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	56.7	LOS E	0.0	0.0	0.90	0.90
P4	West Full Crossing	5	53.2	LOS E	0.0	0.0	0.87	0.87
All Pedestrians		10	54.9	LOS E			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2032 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	994	2.3	1.014	121.5	LOS F	113.7	820.2	1.00	1.17	20.5
2	T1	448	4.9	0.813	62.8	LOS E	17.2	126.2	0.98	0.85	35.3
Approach		1442	3.1	1.014	103.2	LOS F	113.7	820.2	0.99	1.07	23.6
North: Adelaide St											
8	T1	228	2.8	0.082	0.7	LOS A	0.2	1.7	0.03	0.03	88.5
9	R2	724	4.9	0.733	10.4	LOS A	8.2	60.3	0.21	0.73	58.2
Approach		952	4.4	0.733	8.1	LOS A	8.2	60.3	0.17	0.56	63.4
West: William Bailey St (RT Stage 1)											
10	L2	746	2.4	0.516	12.9	LOS A	12.1	86.4	0.38	0.76	63.5
12	R2	259	6.9	0.805	69.8	LOS E	17.6	132.3	1.00	0.87	20.2
Approach		1005	3.6	0.805	27.6	LOS B	17.6	132.3	0.54	0.79	41.1
All Vehicles		3399	3.6	1.014	54.2	LOS D	113.7	820.2	0.63	0.84	33.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	56.7	LOS E	0.0	0.0	0.90	0.90	
P4	West Full Crossing	5	53.2	LOS E	0.0	0.0	0.87	0.87	
All Pedestrians		10	54.9	LOS E			0.89	0.89	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [PM_Adelaide St-William Bailey St - 2037 with Development]

Six Mile-Pacific Hwy

Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Optimum Cycle Time - Minimum Degree of Saturation)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Adelaide St											
1	L2	403	6.3	0.441	12.3	LOS A	7.5	57.0	0.42	0.74	57.4
2	T1	490	4.9	0.858	62.2	LOS E	18.8	138.4	0.99	0.88	35.5
Approach		893	5.5	0.858	39.6	LOS C	18.8	138.4	0.73	0.81	43.0
North: Adelaide St											
8	T1	249	2.8	0.090	0.8	LOS A	0.3	2.0	0.04	0.03	88.3
9	R2	792	4.9	0.821	12.2	LOS A	16.1	118.8	0.37	0.78	56.6
Approach		1042	4.4	0.821	9.4	LOS A	16.1	118.8	0.29	0.60	61.9
West: William Bailey St (RT Stage 1)											
10	L2	816	2.4	0.573	14.0	LOS A	16.1	115.0	0.43	0.78	62.4
12	R2	283	6.9	0.883	74.6	LOS F	20.1	151.7	1.00	0.91	19.7
Approach		1099	3.6	0.883	29.6	LOS C	20.1	151.7	0.58	0.82	40.2
All Vehicles		3034	4.4	0.883	25.6	LOS B	20.1	151.7	0.52	0.74	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	55.1	LOS E	0.0	0.0	0.90	0.90	
P4	West Full Crossing	5	50.7	LOS E	0.0	0.0	0.87	0.87	
All Pedestrians		10	52.9	LOS E			0.89	0.89	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2022 with development & PH Interchange]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	57	31.2	0.061	0.2	LOS A	0.3	2.2	0.15	0.25	74.1
3	R2	61	1.7	0.061	7.1	LOS A	0.3	2.2	0.24	0.39	55.1
Approach		118	16.0	0.061	3.8	NA	0.3	2.2	0.20	0.32	62.9
East: Beaton Ave											
4	L2	125	0.0	0.091	5.0	LOS A	0.4	2.6	0.24	0.52	53.4
6	R2	6	0.0	0.091	5.7	LOS A	0.4	2.6	0.24	0.52	53.1
Approach		131	0.0	0.091	5.0	LOS A	0.4	2.6	0.24	0.52	53.4
North: Newline Rd											
7	L2	3	33.3	0.082	7.6	LOS A	0.0	0.0	0.00	0.02	60.8
8	T1	130	11.3	0.082	0.0	LOS A	0.0	0.0	0.00	0.02	79.0
Approach		133	11.8	0.082	0.2	NA	0.0	0.0	0.00	0.02	78.4
All Vehicles		382	9.1	0.091	3.0	NA	0.4	2.6	0.14	0.28	63.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2027 with development & PH Interchange]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	108	17.3	0.093	0.6	LOS A	0.4	3.2	0.24	0.22	74.6
3	R2	64	1.7	0.093	7.9	LOS A	0.4	3.2	0.36	0.32	55.7
Approach		172	11.5	0.093	3.3	NA	0.4	3.2	0.29	0.26	66.2
East: Beaton Ave											
4	L2	137	0.0	0.122	5.8	LOS A	0.5	3.4	0.40	0.61	52.9
6	R2	6	0.0	0.122	7.3	LOS A	0.5	3.4	0.40	0.61	52.6
Approach		143	0.0	0.122	5.9	LOS A	0.5	3.4	0.40	0.61	52.9
North: Newline Rd											
7	L2	3	33.3	0.185	7.7	LOS A	0.0	0.0	0.00	0.01	61.4
8	T1	327	4.7	0.185	0.0	LOS A	0.0	0.0	0.00	0.01	79.8
Approach		331	5.0	0.185	0.1	NA	0.0	0.0	0.00	0.01	79.6
All Vehicles		646	5.6	0.185	2.2	NA	0.5	3.4	0.17	0.21	68.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Beaton Ave-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2032 with development & PH Interchange]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Newline Rd											
2	T1	131	15.0	0.109	0.8	LOS A	0.5	3.8	0.27	0.21	74.7
3	R2	67	1.8	0.109	8.4	LOS A	0.5	3.8	0.39	0.31	55.8
Approach		198	10.5	0.109	3.4	NA	0.5	3.8	0.31	0.25	67.0
East: Beaton Ave											
4	L2	148	0.0	0.144	6.2	LOS A	0.6	4.0	0.46	0.66	52.7
6	R2	7	0.0	0.144	8.2	LOS A	0.6	4.0	0.46	0.66	52.4
Approach		155	0.0	0.144	6.3	LOS A	0.6	4.0	0.46	0.66	52.7
North: Newline Rd											
7	L2	4	34.3	0.228	7.7	LOS A	0.0	0.0	0.00	0.01	61.0
8	T1	411	3.9	0.228	0.0	LOS A	0.0	0.0	0.00	0.01	79.8
Approach		414	4.2	0.228	0.1	NA	0.0	0.0	0.00	0.01	79.6
All Vehicles		766	5.0	0.228	2.2	NA	0.6	4.0	0.17	0.20	69.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 1 [AM_Beaton Ave-Newline - 2037 with development & PH Interchange]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	169	12.0	0.138	1.2	LOS A	0.6	4.9	0.30	0.20	74.6	
3	R2	70	1.7	0.138	9.4	LOS A	0.6	4.9	0.44	0.29	55.7	
Approach		239	9.0	0.138	3.6	NA	0.6	4.9	0.34	0.23	67.9	
East: Beaton Ave												
4	L2	160	0.0	0.188	7.2	LOS A	0.7	5.2	0.55	0.75	52.1	
6	R2	7	0.0	0.188	10.3	LOS A	0.7	5.2	0.55	0.75	51.8	
Approach		167	0.0	0.188	7.3	LOS A	0.7	5.2	0.55	0.75	52.1	
North: Newline Rd												
7	L2	4	33.3	0.306	7.7	LOS A	0.0	0.0	0.00	0.00	61.3	
8	T1	561	3.0	0.306	0.0	LOS A	0.0	0.0	0.00	0.00	79.8	
Approach		564	3.2	0.306	0.1	NA	0.0	0.0	0.00	0.00	79.7	
All Vehicles		970	4.1	0.306	2.2	NA	0.7	5.2	0.18	0.19	70.2	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [PM_Beaton Ave-Newline - 2022 with development & PH Interchange]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	144	5.8	0.151	0.2	LOS A	0.8	5.5	0.11	0.24	75.0	
3	R2	174	1.8	0.151	6.9	LOS A	0.8	5.5	0.20	0.41	55.3	
Approach		319	3.6	0.151	3.9	NA	0.8	5.5	0.16	0.33	62.8	
East: Beaton Ave												
4	L2	108	4.1	0.085	4.9	LOS A	0.3	2.5	0.18	0.51	53.5	
6	R2	11	10.0	0.085	6.8	LOS A	0.3	2.5	0.18	0.51	52.9	
Approach		119	4.6	0.085	5.0	LOS A	0.3	2.5	0.18	0.51	53.4	
North: Newline Rd												
7	L2	4	0.0	0.051	7.0	LOS A	0.0	0.0	0.00	0.03	74.0	
8	T1	78	16.3	0.051	0.0	LOS A	0.0	0.0	0.00	0.03	79.2	
Approach		82	15.5	0.051	0.4	NA	0.0	0.0	0.00	0.03	79.0	
All Vehicles		519	5.7	0.151	3.6	NA	0.8	5.5	0.14	0.33	62.3	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 1 [PM_Beaton Ave-Newline - 2027 with development & PH Interchange]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	356	2.5	0.249	0.3	LOS A	1.2	8.5	0.17	0.19	75.5
3	R2	183	1.8	0.249	7.2	LOS A	1.2	8.5	0.24	0.27	56.6
Approach		538	2.2	0.249	2.6	NA	1.2	8.5	0.19	0.21	67.8
East: Beaton Ave											
4	L2	118	4.1	0.099	5.1	LOS A	0.4	2.9	0.24	0.53	53.3
6	R2	11	0.0	0.099	8.6	LOS A	0.4	2.9	0.24	0.53	53.1
Approach		128	3.7	0.099	5.3	LOS A	0.4	2.9	0.24	0.53	53.3
North: Newline Rd											
7	L2	4	0.0	0.080	7.0	LOS A	0.0	0.0	0.00	0.02	74.2
8	T1	132	10.0	0.080	0.0	LOS A	0.0	0.0	0.00	0.02	79.5
Approach		137	9.7	0.080	0.2	NA	0.0	0.0	0.00	0.02	79.4
All Vehicles		803	3.7	0.249	2.6	NA	1.2	8.5	0.17	0.23	66.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Beaton Ave-Newline - 2032 with development & PH Interchange]

Beaton Ave - Newline
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Newline Rd											
2	T1	424	2.2	0.285	0.3	LOS A	1.3	9.7	0.18	0.18	75.7
3	R2	192	1.8	0.285	7.3	LOS A	1.3	9.7	0.25	0.25	56.7
Approach		616	2.1	0.285	2.5	NA	1.3	9.7	0.20	0.20	68.5
East: Beaton Ave											
4	L2	127	4.1	0.112	5.1	LOS A	0.5	3.3	0.27	0.54	53.3
6	R2	12	0.0	0.112	9.6	LOS A	0.5	3.3	0.27	0.54	53.0
Approach		139	3.7	0.112	5.5	LOS A	0.5	3.3	0.27	0.54	53.2
North: Newline Rd											
7	L2	5	0.0	0.090	7.0	LOS A	0.0	0.0	0.00	0.02	74.3
8	T1	151	9.2	0.090	0.0	LOS A	0.0	0.0	0.00	0.02	79.6
Approach		156	8.9	0.090	0.2	NA	0.0	0.0	0.00	0.02	79.4
All Vehicles		910	3.5	0.285	2.6	NA	1.3	9.7	0.18	0.22	67.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 1 [PM_Beaton Ave-Newline - 2037 with development & PH Interchange]

Beaton Ave - Newline
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	577	1.7	0.358	0.4	LOS A	1.7	11.8	0.20	0.15	75.9	
3	R2	199	1.8	0.358	7.6	LOS A	1.7	11.8	0.27	0.21	57.0	
Approach		776	1.7	0.358	2.2	NA	1.7	11.8	0.22	0.17	70.0	
East: Beaton Ave												
4	L2	137	4.1	0.131	5.3	LOS A	0.5	3.8	0.32	0.56	53.1	
6	R2	13	0.0	0.131	12.2	LOS A	0.5	3.8	0.32	0.56	52.9	
Approach		150	3.7	0.131	5.9	LOS A	0.5	3.8	0.32	0.56	53.1	
North: Newline Rd												
7	L2	5	0.0	0.111	7.0	LOS A	0.0	0.0	0.00	0.02	74.3	
8	T1	190	7.6	0.111	0.0	LOS A	0.0	0.0	0.00	0.02	79.6	
Approach		195	7.4	0.111	0.2	NA	0.0	0.0	0.00	0.02	79.5	
All Vehicles		1121	3.0	0.358	2.4	NA	1.7	11.8	0.19	0.19	68.5	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 1 [AM_Six Mile Road-Newline 2022 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Newline Rd												
2	T1	16	0.0	0.013	0.0	LOS A	0.0	0.3	0.05	0.20	76.1	
3	R2	7	0.0	0.013	6.7	LOS A	0.0	0.3	0.05	0.20	70.7	
Approach		24	0.0	0.013	2.1	NA	0.0	0.3	0.05	0.20	74.3	
East: Six Mile Rd												
4	L2	15	0.0	0.012	7.0	LOS A	0.0	0.3	0.08	0.60	65.1	
6	R2	3	0.0	0.012	6.8	LOS A	0.0	0.3	0.08	0.60	64.6	
Approach		19	0.0	0.012	7.0	LOS A	0.0	0.3	0.08	0.60	65.0	
North: Newline Rd												
7	L2	1	0.0	0.012	6.9	LOS A	0.0	0.0	0.00	0.03	74.2	
8	T1	22	5.0	0.012	0.0	LOS A	0.0	0.0	0.00	0.03	79.4	
Approach		23	4.8	0.012	0.3	NA	0.0	0.0	0.00	0.03	79.2	
All Vehicles		65	1.7	0.013	2.9	NA	0.0	0.3	0.04	0.25	72.9	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Six Mile Road-Newline 2027 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Newline Rd												
2	T1	27	0.0	0.018	0.0	LOS A	0.0	0.3	0.04	0.14	77.1	
3	R2	8	0.0	0.018	6.7	LOS A	0.0	0.3	0.04	0.14	71.6	
Approach		34	0.0	0.018	1.5	NA	0.0	0.3	0.04	0.14	75.8	
East: Six Mile Rd												
4	L2	17	0.0	0.013	7.0	LOS A	0.1	0.4	0.08	0.60	65.1	
6	R2	4	0.0	0.013	6.8	LOS A	0.1	0.4	0.08	0.60	64.6	
Approach		20	0.0	0.013	7.0	LOS A	0.1	0.4	0.08	0.60	65.0	
North: Newline Rd												
7	L2	1	0.0	0.014	6.9	LOS A	0.0	0.0	0.00	0.02	74.2	
8	T1	25	4.3	0.014	0.0	LOS A	0.0	0.0	0.00	0.02	79.5	
Approach		26	4.2	0.014	0.3	NA	0.0	0.0	0.00	0.02	79.3	
All Vehicles		81	1.4	0.018	2.5	NA	0.1	0.4	0.04	0.22	73.7	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Six Mile Road-Newline 2032 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Newline Rd												
2	T1	31	0.0	0.021	0.0	LOS A	0.0	0.3	0.04	0.13	77.4	
3	R2	8	0.0	0.021	6.7	LOS A	0.0	0.3	0.04	0.13	71.8	
Approach		39	0.0	0.021	1.4	NA	0.0	0.3	0.04	0.13	76.1	
East: Six Mile Rd												
4	L2	18	0.0	0.014	7.0	LOS A	0.1	0.4	0.09	0.60	65.0	
6	R2	4	0.0	0.014	6.8	LOS A	0.1	0.4	0.09	0.60	64.6	
Approach		22	0.0	0.014	7.0	LOS A	0.1	0.4	0.09	0.60	65.0	
North: Newline Rd												
7	L2	1	0.0	0.015	6.9	LOS A	0.0	0.0	0.00	0.02	74.3	
8	T1	27	4.1	0.015	0.0	LOS A	0.0	0.0	0.00	0.02	79.5	
Approach		28	3.9	0.015	0.2	NA	0.0	0.0	0.00	0.02	79.3	
All Vehicles		89	1.2	0.021	2.4	NA	0.1	0.4	0.04	0.21	74.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM_Six Mile Road-Newline 2037 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Newline Rd												
2	T1	39	0.0	0.025	0.0	LOS A	0.0	0.3	0.04	0.11	77.7	
3	R2	8	0.0	0.025	6.7	LOS A	0.0	0.3	0.04	0.11	72.0	
Approach		48	0.0	0.025	1.2	NA	0.0	0.3	0.04	0.11	76.6	
East: Six Mile Rd												
4	L2	20	0.0	0.016	7.0	LOS A	0.1	0.4	0.09	0.60	65.0	
6	R2	4	0.0	0.016	6.9	LOS A	0.1	0.4	0.09	0.60	64.5	
Approach		24	0.0	0.016	7.0	LOS A	0.1	0.4	0.09	0.60	64.9	
North: Newline Rd												
7	L2	1	0.0	0.016	6.9	LOS A	0.0	0.0	0.00	0.02	74.3	
8	T1	30	4.0	0.016	0.0	LOS A	0.0	0.0	0.00	0.02	79.6	
Approach		31	3.8	0.016	0.2	NA	0.0	0.0	0.00	0.02	79.4	
All Vehicles		103	1.2	0.025	2.3	NA	0.1	0.4	0.04	0.20	74.3	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2022 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	60	10.6	0.040	0.0	LOS A	0.0	0.4	0.03	0.08	78.2	
3	R2	8	0.0	0.040	6.7	LOS A	0.0	0.4	0.03	0.08	72.5	
Approach		68	9.3	0.040	0.8	NA	0.0	0.4	0.03	0.08	77.4	
East: Six Mile Rd												
4	L2	9	12.5	0.007	7.3	LOS A	0.0	0.2	0.11	0.59	64.5	
6	R2	1	0.0	0.007	7.0	LOS A	0.0	0.2	0.11	0.59	64.4	
Approach		10	11.1	0.007	7.2	LOS A	0.0	0.2	0.11	0.59	64.5	
North: Newline Rd												
7	L2	1	0.0	0.025	6.9	LOS A	0.0	0.0	0.00	0.02	74.3	
8	T1	36	17.6	0.025	0.0	LOS A	0.0	0.0	0.00	0.02	79.6	
Approach		37	17.1	0.025	0.2	NA	0.0	0.0	0.00	0.02	79.4	
All Vehicles		115	12.0	0.040	1.2	NA	0.0	0.4	0.03	0.10	76.7	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2027 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	65	10.1	0.043	0.0	LOS A	0.1	0.4	0.04	0.08	78.2	
3	R2	9	0.0	0.043	6.8	LOS A	0.1	0.4	0.04	0.08	72.5	
Approach		74	8.9	0.043	0.8	NA	0.1	0.4	0.04	0.08	77.5	
East: Six Mile Rd												
4	L2	10	12.5	0.008	7.3	LOS A	0.0	0.2	0.13	0.59	64.4	
6	R2	1	0.0	0.008	7.1	LOS A	0.0	0.2	0.13	0.59	64.4	
Approach		11	11.1	0.008	7.3	LOS A	0.0	0.2	0.13	0.59	64.4	
North: Newline Rd												
7	L2	1	0.0	0.031	6.9	LOS A	0.0	0.0	0.00	0.01	74.4	
8	T1	48	13.7	0.031	0.0	LOS A	0.0	0.0	0.00	0.01	79.7	
Approach		49	13.4	0.031	0.2	NA	0.0	0.0	0.00	0.01	79.5	
All Vehicles		134	10.7	0.043	1.1	NA	0.1	0.4	0.03	0.10	77.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2032 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	68	10.1	0.045	0.0	LOS A	0.1	0.4	0.04	0.08	78.2	
3	R2	9	0.0	0.045	6.8	LOS A	0.1	0.4	0.04	0.08	72.5	
Approach		77	8.9	0.045	0.8	NA	0.1	0.4	0.04	0.08	77.5	
East: Six Mile Rd												
4	L2	10	12.6	0.008	7.3	LOS A	0.0	0.2	0.14	0.58	64.3	
6	R2	1	0.0	0.008	7.1	LOS A	0.0	0.2	0.14	0.58	64.3	
Approach		12	11.2	0.008	7.3	LOS A	0.0	0.2	0.14	0.58	64.3	
North: Newline Rd												
7	L2	1	0.0	0.034	6.9	LOS A	0.0	0.0	0.00	0.01	74.4	
8	T1	53	12.9	0.034	0.0	LOS A	0.0	0.0	0.00	0.01	79.7	
Approach		54	12.6	0.034	0.1	NA	0.0	0.0	0.00	0.01	79.6	
All Vehicles		143	10.5	0.045	1.1	NA	0.1	0.4	0.03	0.09	77.0	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM_Six Mile Road-Newline 2037 with Development & PH Interchange]

Six Mile Road - Newline Road
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	73	9.8	0.048	0.0	LOS A	0.1	0.4	0.04	0.08	78.2	
3	R2	10	0.0	0.048	6.8	LOS A	0.1	0.4	0.04	0.08	72.5	
Approach		83	8.7	0.048	0.8	NA	0.1	0.4	0.04	0.08	77.5	
East: Six Mile Rd												
4	L2	11	12.5	0.009	7.3	LOS A	0.0	0.3	0.15	0.58	64.3	
6	R2	1	0.0	0.009	7.1	LOS A	0.0	0.3	0.15	0.58	64.3	
Approach		13	11.1	0.009	7.3	LOS A	0.0	0.3	0.15	0.58	64.3	
North: Newline Rd												
7	L2	1	0.0	0.039	6.9	LOS A	0.0	0.0	0.00	0.01	74.4	
8	T1	62	11.6	0.039	0.0	LOS A	0.0	0.0	0.00	0.01	79.7	
Approach		63	11.4	0.039	0.1	NA	0.0	0.0	0.00	0.01	79.6	
All Vehicles		159	10.0	0.048	1.1	NA	0.1	0.4	0.03	0.09	77.1	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [AM_Six Mile-Pacific Hwy - 2022 with Development & PH Interchange]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Pacific Hwy												
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6	
2	T1	643	14.5	0.218	0.0	LOS A	0.0	0.0	0.00	0.00	89.9	
Approach		644	14.5	0.218	0.0	NA	0.0	0.0	0.00	0.00	89.8	
North: Pacific Hwy												
8	T1	850	14.1	0.284	0.0	LOS A	0.0	0.0	0.00	0.00	89.7	
Approach		850	14.1	0.284	0.0	NA	0.0	0.0	0.00	0.00	89.7	
West: Six Mile Rd (RT Stage 1)												
10	L2	6	0.0	0.010	13.6	LOS A	0.0	0.2	0.55	0.88	64.4	
Approach		6	0.0	0.010	13.6	LOS A	0.0	0.2	0.55	0.88	64.4	
All Vehicles		1500	14.2	0.284	0.1	NA	0.0	0.2	0.00	0.00	89.6	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [AM_Six Mile-Pacific Hwy - 2027 with Development & PH Interchange]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Pacific Hwy												
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6	
2	T1	734	14.4	0.248	0.0	LOS A	0.0	0.0	0.00	0.00	89.8	
Approach		735	14.4	0.248	0.0	NA	0.0	0.0	0.00	0.00	89.8	
North: Pacific Hwy												
8	T1	964	14.1	0.321	0.1	LOS A	0.0	0.0	0.00	0.00	89.7	
Approach		964	14.1	0.321	0.1	NA	0.0	0.0	0.00	0.00	89.7	
West: Six Mile Rd (RT Stage 1)												
10	L2	6	0.0	0.013	14.7	LOS B	0.0	0.3	0.61	0.90	63.3	
Approach		6	0.0	0.013	14.7	LOS B	0.0	0.3	0.61	0.90	63.3	
All Vehicles		1705	14.1	0.321	0.1	NA	0.0	0.3	0.00	0.00	89.6	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Six Mile-Pacific Hwy (PHI).sip7

MOVEMENT SUMMARY

 **Site: 1 [AM_Six Mile-Pacific Hwy - 2032 with Development & PH Interchange]**

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Pacific Hwy												
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6	
2	T1	804	14.3	0.272	0.0	LOS A	0.0	0.0	0.00	0.00	89.8	
Approach		805	14.3	0.272	0.1	NA	0.0	0.0	0.00	0.00	89.8	
North: Pacific Hwy												
8	T1	1054	14.1	0.351	0.1	LOS A	0.0	0.0	0.00	0.00	89.7	
Approach		1054	14.1	0.351	0.1	NA	0.0	0.0	0.00	0.00	89.7	
West: Six Mile Rd (RT Stage 1)												
10	L2	6	0.0	0.015	15.6	LOS B	0.0	0.3	0.65	0.92	62.3	
Approach		6	0.0	0.015	15.6	LOS B	0.0	0.3	0.65	0.92	62.3	
All Vehicles		1866	14.1	0.351	0.1	NA	0.0	0.3	0.00	0.00	89.6	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [AM_Six Mile-Pacific Hwy - 2037 with Development & PH Interchange]**

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Pacific Hwy												
1	L2	2	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6	
2	T1	910	14.3	0.307	0.0	LOS A	0.0	0.0	0.00	0.00	89.8	
Approach		912	14.3	0.307	0.1	NA	0.0	0.0	0.00	0.00	89.7	
North: Pacific Hwy												
8	T1	1189	14.0	0.396	0.1	LOS A	0.0	0.0	0.00	0.00	89.6	
Approach		1189	14.0	0.396	0.1	NA	0.0	0.0	0.00	0.00	89.6	
West: Six Mile Rd (RT Stage 1)												
10	L2	7	0.0	0.020	17.4	LOS B	0.1	0.4	0.71	0.96	60.6	
Approach		7	0.0	0.020	17.4	LOS B	0.1	0.4	0.71	0.96	60.6	
All Vehicles		2108	14.1	0.396	0.1	NA	0.1	0.4	0.00	0.00	89.5	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [PM_Six Mile-Pacific Hwy - 2022 with Development & PH Interchange]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Pacific Hwy												
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6	
2	T1	914	14.6	0.321	0.1	LOS A	0.0	0.0	0.00	0.00	89.8	
Approach		915	14.6	0.321	0.1	NA	0.0	0.0	0.00	0.00	89.7	
North: Pacific Hwy												
8	T1	697	10.1	0.213	0.0	LOS A	0.0	0.0	0.00	0.00	89.9	
Approach		697	10.1	0.213	0.0	NA	0.0	0.0	0.00	0.00	89.9	
West: Six Mile Rd (RT Stage 1)												
10	L2	6	0.0	0.016	17.5	LOS B	0.1	0.4	0.71	0.95	60.6	
Approach		6	0.0	0.016	17.5	LOS B	0.1	0.4	0.71	0.95	60.6	
All Vehicles		1618	12.6	0.321	0.1	NA	0.1	0.4	0.00	0.00	89.7	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 **Site: 1 [PM_Six Mile-Pacific Hwy - 2027 with Development & PH Interchange]**

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Pacific Hwy												
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6	
2	T1	1034	14.6	0.363	0.1	LOS A	0.0	0.0	0.00	0.00	89.7	
Approach		1036	14.6	0.363	0.1	NA	0.0	0.0	0.00	0.00	89.7	
North: Pacific Hwy												
8	T1	786	10.1	0.241	0.0	LOS A	0.0	0.0	0.00	0.00	89.9	
Approach		786	10.1	0.241	0.0	NA	0.0	0.0	0.00	0.00	89.9	
West: Six Mile Rd (RT Stage 1)												
10	L2	6	0.0	0.021	20.0	LOS B	0.1	0.5	0.77	0.99	58.2	
Approach		6	0.0	0.021	20.0	LOS B	0.1	0.5	0.77	0.99	58.2	
All Vehicles		1827	12.6	0.363	0.1	NA	0.1	0.5	0.00	0.00	89.6	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).


HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Six Mile-Pacific Hwy (PHI).sip7

MOVEMENT SUMMARY

 Site: 1 [PM_Six Mile-Pacific Hwy - 2032 with Development & PH Interchange]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pacific Hwy											
1	L2	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6
2	T1	1130	14.6	0.396	0.1	LOS A	0.0	0.0	0.00	0.00	89.7
Approach		1132	14.6	0.396	0.1	NA	0.0	0.0	0.00	0.00	89.6
North: Pacific Hwy											
8	T1	859	10.1	0.263	0.0	LOS A	0.0	0.0	0.00	0.00	89.8
Approach		859	10.1	0.263	0.0	NA	0.0	0.0	0.00	0.00	89.8
West: Six Mile Rd (RT Stage 1)											
10	L2	6	0.0	0.027	22.6	LOS B	0.1	0.6	0.81	1.00	56.0
Approach		6	0.0	0.027	22.6	LOS B	0.1	0.6	0.81	1.00	56.0
All Vehicles		1997	12.6	0.396	0.1	NA	0.1	0.6	0.00	0.00	89.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 1 [PM_Six Mile-Pacific Hwy - 2037 with Development & PH Interchange]

Six Mile-Pacific Hwy
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h	
South: Pacific Hwy												
1	L2	2	0.0	0.001	7.4	LOS A	0.0	0.0	0.00	0.65	70.6	
2	T1	1275	14.6	0.447	0.1	LOS A	0.0	0.0	0.00	0.00	89.6	
Approach		1277	14.6	0.447	0.1	NA	0.0	0.0	0.00	0.00	89.6	
North: Pacific Hwy												
8	T1	968	10.1	0.296	0.0	LOS A	0.0	0.0	0.00	0.00	89.8	
Approach		968	10.1	0.296	0.0	NA	0.0	0.0	0.00	0.00	89.8	
West: Six Mile Rd (RT Stage 1)												
10	L2	7	0.0	0.039	27.7	LOS B	0.1	0.8	0.86	1.00	52.0	
Approach		7	0.0	0.039	27.7	LOS B	0.1	0.8	0.86	1.00	52.0	
All Vehicles		2252	12.6	0.447	0.2	NA	0.1	0.8	0.00	0.00	89.5	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Six Mile-Pacific Hwy (PHI).sip7

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2022 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveway / Yield
(Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	40	2.7	0.030	0.2	LOS A	0.1	1.6	0.07	0.09	78.8
3	R2	21	84.8	0.030	9.1	LOS A	0.1	1.6	0.26	0.36	54.8
Approach		61	30.9	0.030	3.2	NA	0.1	1.6	0.13	0.18	68.5
East: Waste Process Centre (Access)											
4	L2	20	72.2	0.020	5.9	LOS A	0.1	1.1	0.24	0.50	40.0
6	R2	1	0.0	0.020	5.2	LOS A	0.1	1.1	0.24	0.50	53.1
Approach		21	68.8	0.020	5.9	LOS A	0.1	1.1	0.24	0.50	40.5
North: Newline Rd											
7	L2	1	0.0	0.059	6.9	LOS A	0.0	0.0	0.00	0.01	74.5
8	T1	112	1.9	0.059	0.0	LOS A	0.0	0.0	0.00	0.01	79.9
Approach		113	1.9	0.059	0.1	NA	0.0	0.0	0.00	0.01	79.8
All Vehicles		195	18.1	0.059	1.7	NA	0.1	1.6	0.07	0.11	69.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Waste Processing Centre-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2027 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveway / Yield
(Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	90	1.2	0.055	0.6	LOS A	0.2	2.6	0.15	0.07	78.3
3	R2	22	85.0	0.055	10.8	LOS A	0.2	2.6	0.39	0.18	55.1
Approach		113	17.6	0.055	2.6	NA	0.2	2.6	0.20	0.09	72.3
East: Waste Process Centre (Access)											
4	L2	22	72.2	0.028	7.3	LOS A	0.1	1.6	0.42	0.59	39.6
6	R2	1	0.0	0.028	6.5	LOS A	0.1	1.6	0.42	0.59	52.4
Approach		23	69.0	0.028	7.3	LOS A	0.1	1.6	0.42	0.59	40.0
North: Newline Rd											
7	L2	1	0.0	0.160	7.0	LOS A	0.0	0.0	0.00	0.00	74.6
8	T1	310	0.7	0.160	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		311	0.7	0.160	0.0	NA	0.0	0.0	0.00	0.00	79.9
All Vehicles		447	8.4	0.160	1.1	NA	0.2	2.6	0.07	0.05	74.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Waste Processing Centre-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2032 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveway / Yield
(Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	112	1.0	0.066	0.9	LOS A	0.3	3.1	0.17	0.06	77.9	
3	R2	23	85.0	0.066	11.7	LOS A	0.3	3.1	0.42	0.15	54.6	
Approach		134	15.2	0.066	2.7	NA	0.3	3.1	0.21	0.08	72.7	
East: Waste Process Centre (Access)												
4	L2	23	72.3	0.033	8.1	LOS A	0.1	1.9	0.48	0.63	39.3	
6	R2	1	0.0	0.033	7.1	LOS A	0.1	1.9	0.48	0.63	51.8	
Approach		24	69.3	0.033	8.0	LOS A	0.1	1.9	0.48	0.63	39.7	
North: Newline Rd												
7	L2	1	0.0	0.203	7.0	LOS A	0.0	0.0	0.00	0.00	74.6	
8	T1	393	0.6	0.203	0.0	LOS A	0.0	0.0	0.00	0.00	79.9	
Approach		394	0.6	0.203	0.0	NA	0.0	0.0	0.00	0.00	79.9	
All Vehicles		552	7.1	0.203	1.0	NA	0.3	3.1	0.07	0.05	74.8	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Waste Processing Centre-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2022 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveway / Yield
(Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	148	4.3	0.054	0.0	LOS A	0.0	0.2	0.01	0.02	79.6
3	R2	4	0.0	0.054	6.8	LOS A	0.0	0.2	0.02	0.03	59.8
Approach		152	4.2	0.054	0.2	NA	0.0	0.2	0.01	0.02	78.9
East: Waste Process Centre (Access)											
4	L2	20	27.8	0.016	5.1	LOS A	0.1	0.6	0.15	0.50	47.5
6	R2	1	0.0	0.016	5.4	LOS A	0.1	0.6	0.15	0.50	53.4
Approach		21	26.3	0.016	5.1	LOS A	0.1	0.6	0.15	0.50	47.7
North: Newline Rd											
7	L2	1	0.0	0.038	6.9	LOS A	0.0	0.0	0.00	0.01	74.4
8	T1	62	12.2	0.038	0.0	LOS A	0.0	0.0	0.00	0.01	79.8
Approach		63	12.0	0.038	0.1	NA	0.0	0.0	0.00	0.01	79.7
All Vehicles		235	8.2	0.054	0.6	NA	0.1	0.6	0.02	0.06	74.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Waste Processing Centre-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2027 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveway / Yield
(Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	359	1.8	0.125	0.0	LOS A	0.0	0.2	0.01	0.01	79.8
3	R2	4	0.0	0.125	7.0	LOS A	0.0	0.2	0.01	0.01	60.0
Approach		363	1.8	0.125	0.1	NA	0.0	0.2	0.01	0.01	79.5
East: Waste Process Centre (Access)											
4	L2	22	27.8	0.018	5.3	LOS A	0.1	0.7	0.22	0.50	47.3
6	R2	1	0.0	0.018	6.7	LOS A	0.1	0.7	0.22	0.50	53.2
Approach		23	26.3	0.018	5.4	LOS A	0.1	0.7	0.22	0.50	47.6
North: Newline Rd											
7	L2	1	0.0	0.066	7.0	LOS A	0.0	0.0	0.00	0.01	74.5
8	T1	115	6.7	0.066	0.0	LOS A	0.0	0.0	0.00	0.01	79.9
Approach		116	6.6	0.066	0.1	NA	0.0	0.0	0.00	0.01	79.8
All Vehicles		503	4.0	0.125	0.3	NA	0.1	0.7	0.02	0.03	77.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2032 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveway / Yield
(Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	427	1.6	0.148	0.0	LOS A	0.0	0.2	0.01	0.01	79.8
3	R2	5	0.0	0.148	7.1	LOS A	0.0	0.2	0.01	0.01	60.0
Approach		432	1.6	0.148	0.1	NA	0.0	0.2	0.01	0.01	79.5
East: Waste Process Centre (Access)											
4	L2	23	27.8	0.020	5.4	LOS A	0.1	0.8	0.24	0.51	47.2
6	R2	1	0.0	0.020	7.2	LOS A	0.1	0.8	0.24	0.51	53.1
Approach		24	26.3	0.020	5.5	LOS A	0.1	0.8	0.24	0.51	47.5
North: Newline Rd											
7	L2	1	0.0	0.076	7.0	LOS A	0.0	0.0	0.00	0.00	74.5
8	T1	133	5.9	0.076	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		134	5.9	0.076	0.1	NA	0.0	0.0	0.00	0.00	79.8
All Vehicles		590	3.6	0.148	0.3	NA	0.1	0.8	0.01	0.03	77.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: N:\AU\Sydney\Projects\22\19143\SIDRA\SIDRA 7\PH Interchange\Waste Processing Centre-Newline Rd (PHI).sip7

MOVEMENT SUMMARY

▽ Site: 1 [AM Waste Processing Centre-Newline 2037 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveaway / Yield
(Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Newline Rd											
2	T1	150	0.8	0.087	1.5	LOS A	0.5	4.5	0.19	0.05	76.9
3	R2	24	85.0	0.087	14.0	LOS A	0.5	4.5	0.47	0.12	53.5
Approach		174	12.4	0.087	3.2	NA	0.5	4.5	0.23	0.06	72.5
East: Waste Process Centre (Access)											
4	L2	25	72.2	0.047	9.8	LOS A	0.2	2.5	0.56	0.72	38.5
6	R2	1	0.0	0.047	8.7	LOS A	0.2	2.5	0.56	0.72	50.5
Approach		26	69.5	0.047	9.8	LOS A	0.2	2.5	0.56	0.72	38.9
North: Newline Rd											
7	L2	1	0.0	0.280	7.0	LOS A	0.0	0.0	0.00	0.00	74.5
8	T1	543	0.4	0.280	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		544	0.4	0.280	0.0	NA	0.0	0.0	0.00	0.00	79.9
All Vehicles		744	5.7	0.280	1.1	NA	0.5	4.5	0.07	0.04	75.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Waste Processing Centre-Newline 2037 with development & PH Interchange]

Waste Processing Centre Access - Newline Road Giveway / Yield
(Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Newline Rd												
2	T1	579	1.2	0.199	0.0	LOS A	0.0	0.2	0.00	0.01	79.9	
3	R2	5	0.0	0.199	6.8	LOS A	0.0	0.2	0.01	0.01	60.1	
Approach		584	1.2	0.199	0.1	NA	0.0	0.2	0.00	0.01	79.7	
East: Waste Process Centre (Access)												
4	L2	25	27.8	0.021	5.1	LOS A	0.1	0.8	0.15	0.50	47.5	
6	R2	1	0.0	0.021	7.9	LOS A	0.1	0.8	0.15	0.50	53.4	
Approach		27	26.3	0.021	5.2	LOS A	0.1	0.8	0.15	0.50	47.8	
North: Newline Rd												
7	L2	1	0.0	0.041	6.9	LOS A	0.0	0.0	0.00	0.01	74.4	
8	T1	59	20.4	0.041	0.0	LOS A	0.0	0.0	0.00	0.01	79.7	
Approach		60	20.0	0.041	0.1	NA	0.0	0.0	0.00	0.01	79.6	
All Vehicles		670	3.9	0.199	0.3	NA	0.1	0.8	0.01	0.03	77.6	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 1 [AM Development - Newline Rd 2022 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: New Line Road											
2	T1	23	4.7	0.012	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	17	0.0	0.012	5.6	LOS A	0.0	0.3	0.11	0.55	53.1
Approach		40	2.7	0.012	2.4	NA	0.0	0.3	0.05	0.23	56.8
East: Development Road											
4	L2	69	0.0	0.060	5.7	LOS A	0.2	1.5	0.11	0.55	53.3
6	R2	2	0.0	0.002	6.1	LOS A	0.0	0.1	0.21	0.53	52.8
Approach		71	0.0	0.060	5.7	LOS A	0.2	1.5	0.12	0.55	53.2
North: Newline Road											
7	L2	1	0.0	0.020	5.5	LOS A	0.0	0.0	0.00	0.02	58.2
8	T1	37	3.0	0.020	0.0	LOS A	0.0	0.0	0.00	0.02	59.8
Approach		38	2.9	0.020	0.1	NA	0.0	0.0	0.00	0.02	59.8
All Vehicles		149	1.5	0.060	3.4	NA	0.2	1.5	0.07	0.33	55.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [AM Development - Newline Rd 2027 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: New Line Road											
2	T1	24	0.0	0.012	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	66	0.0	0.048	5.7	LOS A	0.2	1.3	0.12	0.55	53.0
Approach		90	0.0	0.048	4.1	NA	0.2	1.3	0.09	0.40	54.7
East: Development Road											
4	L2	265	0.0	0.230	5.8	LOS A	1.0	7.0	0.14	0.55	53.2
6	R2	13	0.0	0.018	6.6	LOS A	0.1	0.5	0.29	0.56	52.5
Approach		278	0.0	0.230	5.8	LOS A	1.0	7.0	0.15	0.55	53.1
North: Newline Road											
7	L2	3	0.0	0.022	5.5	LOS A	0.0	0.0	0.00	0.04	58.0
8	T1	39	2.8	0.022	0.0	LOS A	0.0	0.0	0.00	0.04	59.6
Approach		42	2.6	0.022	0.4	NA	0.0	0.0	0.00	0.04	59.5
All Vehicles		410	0.3	0.230	4.9	NA	1.0	7.0	0.12	0.46	54.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Development - Newline Rd 2032 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: New Line Road											
2	T1	25	4.4	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	87	0.0	0.063	5.7	LOS A	0.3	1.8	0.13	0.55	53.0
Approach		112	1.0	0.063	4.4	NA	0.3	1.8	0.10	0.43	54.4
East: Development Road											
4	L2	346	0.0	0.301	5.8	LOS A	1.4	9.9	0.16	0.55	53.1
6	R2	17	0.0	0.024	6.9	LOS A	0.1	0.6	0.32	0.58	52.3
Approach		363	0.0	0.301	5.9	LOS A	1.4	9.9	0.17	0.55	53.1
North: Newline Road											
7	L2	4	0.0	0.023	5.5	LOS A	0.0	0.0	0.00	0.05	57.9
8	T1	41	2.7	0.023	0.0	LOS A	0.0	0.0	0.00	0.05	59.5
Approach		45	2.5	0.023	0.5	NA	0.0	0.0	0.00	0.05	59.4
All Vehicles		520	0.4	0.301	5.1	NA	1.4	9.9	0.14	0.48	53.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [AM Development - Newline Rd 2037 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: New Line Road											
2	T1	26	4.5	0.014	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	123	0.0	0.089	5.7	LOS A	0.4	2.6	0.14	0.55	53.0
Approach		149	0.8	0.089	4.7	NA	0.4	2.6	0.12	0.45	54.1
East: Development Road											
4	L2	493	0.0	0.430	5.9	LOS A	2.4	16.9	0.20	0.54	53.0
6	R2	25	0.0	0.037	7.4	LOS A	0.1	1.0	0.37	0.60	52.0
Approach		518	0.0	0.430	6.0	LOS A	2.4	16.9	0.21	0.55	52.9
North: Newline Road											
7	L2	6	0.0	0.026	5.5	LOS A	0.0	0.0	0.00	0.07	57.7
8	T1	44	2.8	0.026	0.0	LOS A	0.0	0.0	0.00	0.07	59.3
Approach		50	2.4	0.026	0.7	NA	0.0	0.0	0.00	0.07	59.1
All Vehicles		717	0.3	0.430	5.3	NA	2.4	16.9	0.17	0.49	53.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Development - Newline Rd 2022 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: New Line Road											
2	T1	76	8.4	0.042	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	73	0.0	0.053	5.7	LOS A	0.2	1.5	0.13	0.55	53.0
Approach		149	4.3	0.053	2.8	NA	0.2	1.5	0.07	0.27	56.4
East: Development Road											
4	L2	18	0.0	0.016	5.7	LOS A	0.1	0.4	0.13	0.54	53.2
6	R2	1	0.0	0.001	7.2	LOS A	0.0	0.0	0.36	0.54	52.1
Approach		19	0.0	0.016	5.8	LOS A	0.1	0.4	0.14	0.54	53.2
North: Newline Road											
7	L2	4	0.0	0.030	5.5	LOS A	0.0	0.0	0.00	0.05	57.9
8	T1	42	18.1	0.030	0.0	LOS A	0.0	0.0	0.00	0.05	59.5
Approach		45	16.6	0.030	0.5	NA	0.0	0.0	0.00	0.05	59.3
All Vehicles		213	6.5	0.053	2.6	NA	0.2	1.5	0.06	0.25	56.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Development - Newline Rd 2027 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: New Line Road											
2	T1	79	8.3	0.044	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	281	0.0	0.207	5.8	LOS A	1.0	6.7	0.18	0.55	52.9
Approach		360	1.8	0.207	4.5	NA	1.0	6.7	0.14	0.43	54.3
East: Development Road											
4	L2	70	0.0	0.062	5.8	LOS A	0.2	1.6	0.15	0.55	53.2
6	R2	4	0.0	0.008	10.2	LOS A	0.0	0.2	0.52	0.65	50.0
Approach		74	0.0	0.062	6.0	LOS A	0.2	1.6	0.16	0.55	53.0
North: Newline Road											
7	L2	15	7.8	0.038	5.6	LOS A	0.0	0.0	0.00	0.15	56.6
8	T1	44	17.8	0.038	0.0	LOS A	0.0	0.0	0.00	0.15	58.5
Approach		59	15.3	0.038	1.5	NA	0.0	0.0	0.00	0.15	58.0
All Vehicles		493	3.2	0.207	4.4	NA	1.0	6.7	0.13	0.42	54.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Development - Newline Rd 2032 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: New Line Road											
2	T1	82	8.3	0.046	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	346	0.0	0.256	5.8	LOS A	1.3	8.8	0.19	0.55	52.8
Approach		428	1.6	0.256	4.7	NA	1.3	8.8	0.16	0.45	54.1
East: Development Road											
4	L2	87	0.0	0.076	5.8	LOS A	0.3	2.0	0.15	0.55	53.1
6	R2	4	0.0	0.011	11.5	LOS A	0.0	0.3	0.56	0.69	49.1
Approach		91	0.0	0.076	6.1	LOS A	0.3	2.0	0.17	0.55	52.9
North: Newline Road											
7	L2	17	0.0	0.040	5.5	LOS A	0.0	0.0	0.00	0.16	56.8
8	T1	46	17.8	0.040	0.0	LOS A	0.0	0.0	0.00	0.16	58.3
Approach		63	12.9	0.040	1.5	NA	0.0	0.0	0.00	0.16	57.9
All Vehicles		582	2.6	0.256	4.6	NA	1.3	8.8	0.14	0.43	54.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 1 [PM Development - Newline Rd 2037 with PH Interchange]

New Site
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: New Line Road											
2	T1	87	8.3	0.048	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
3	R2	494	0.0	0.368	5.9	LOS A	2.0	14.3	0.24	0.56	52.7
Approach		580	1.2	0.368	5.1	NA	2.0	14.3	0.20	0.47	53.7
East: Development Road											
4	L2	123	0.0	0.110	5.9	LOS A	0.4	2.9	0.17	0.55	53.1
6	R2	6	0.0	0.021	15.4	LOS B	0.1	0.5	0.68	0.81	46.6
Approach		130	0.0	0.110	6.3	LOS A	0.4	2.9	0.19	0.56	52.7
North: Newline Road											
7	L2	25	0.0	0.045	5.5	LOS A	0.0	0.0	0.00	0.20	56.5
8	T1	48	17.8	0.045	0.0	LOS A	0.0	0.0	0.00	0.20	58.0
Approach		73	11.8	0.045	1.9	NA	0.0	0.0	0.00	0.20	57.5
All Vehicles		783	2.0	0.368	5.0	NA	2.0	14.3	0.18	0.46	53.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
1	OP	M Lucas	On file	A lee	On file	02/08/18
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